

# SECTION **WCS**

## WARNING CHIME SYSTEM

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

### CONTENTS

|  |  |
|--|--|
| <p><b>PRECAUTION</b> ..... 3</p> <p><b>PRECAUTIONS</b> ..... 3</p> <p style="padding-left: 20px;">Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....3</p> <p style="padding-left: 20px;">Precautions for Removing Battery Terminal .....3</p> <p><b>SYSTEM DESCRIPTION</b> ..... 4</p> <p><b>COMPONENT PARTS</b> ..... 4</p> <p style="padding-left: 20px;">Component Parts Location .....4</p> <p style="padding-left: 20px;">Combination Meter .....4</p> <p><b>SYSTEM</b> ..... 5</p> <p><b>WARNING CHIME SYSTEM</b> .....5</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : System Description .....5</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Circuit Diagram .....6</p> <p style="padding-left: 20px;">WARNING CHIME SYSTEM : Fail-Safe .....6</p> <p><b>WARNING CHIME</b> .....7</p> <p style="padding-left: 20px;">WARNING CHIME : ACC Warning (Buzzer) .....7</p> <p style="padding-left: 20px;">WARNING CHIME : Door Lock Operation Warning .....8</p> <p style="padding-left: 20px;">WARNING CHIME : Light Reminder Warning (Buzzer) .....9</p> <p style="padding-left: 20px;">WARNING CHIME : OFF Position Warning ..... 11</p> <p style="padding-left: 20px;">WARNING CHIME : P Position Warning (Buzzer)... 13</p> <p style="padding-left: 20px;">WARNING CHIME : Parking Brake Release Warning Chime ..... 15</p> <p style="padding-left: 20px;">WARNING CHIME : Seat Belt Warning ..... 17</p> <p style="padding-left: 20px;">WARNING CHIME : Take Away Warning (Buzzer) .... 18</p> <p><b>DIAGNOSIS SYSTEM (COMBINATION METER)</b> .....23</p> <p style="padding-left: 20px;">CONSULT Function .....23</p> <p><b>DIAGNOSIS SYSTEM (BCM)</b> .....29</p> | <p><b>COMMON ITEM</b> .....29</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) .....29</p> <p><b>BUZZER</b> .....30</p> <p style="padding-left: 20px;">BUZZER : CONSULT Function (BCM - BUZZER)...30</p> <p><b>ECU DIAGNOSIS INFORMATION</b> .....32</p> <p><b>COMBINATION METER</b> .....32</p> <p style="padding-left: 20px;">Reference Value .....32</p> <p style="padding-left: 20px;">Fail-Safe .....41</p> <p style="padding-left: 20px;">DTC Index .....42</p> <p><b>BCM</b> .....44</p> <p style="padding-left: 20px;">List of ECU Reference .....44</p> <p><b>WIRING DIAGRAM</b> .....45</p> <p><b>WARNING CHIME SYSTEM</b> .....45</p> <p style="padding-left: 20px;">Wiring Diagram .....45</p> <p><b>BASIC INSPECTION</b> .....50</p> <p><b>DIAGNOSIS AND REPAIR WORKFLOW</b> .....50</p> <p style="padding-left: 20px;">Work Flow .....50</p> <p><b>DTC/CIRCUIT DIAGNOSIS</b> .....52</p> <p><b>POWER SUPPLY AND GROUND CIRCUIT</b> ....52</p> <p><b>COMBINATION METER</b> .....52</p> <p style="padding-left: 20px;">COMBINATION METER : Diagnosis Procedure ....52</p> <p><b>METER BUZZER CIRCUIT</b> .....53</p> <p style="padding-left: 20px;">Component Function Check .....53</p> <p style="padding-left: 20px;">Diagnosis Procedure .....53</p> <p><b>SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)</b> .....54</p> <p style="padding-left: 20px;">Component Function Check .....54</p> <p style="padding-left: 20px;">Diagnosis Procedure .....54</p> <p style="padding-left: 20px;">Component Inspection .....</p> |
|--|--|

WCS

---

|  |           |
|--|-----------|
| <b>PARKING BRAKE SWITCH SIGNAL CIR-<br/>CUIT .....</b>     | <b>56</b> |
| Component Function Check .....                             | 56        |
| Diagnosis Procedure .....                                  | 56        |
| Component Inspection .....                                 | 56        |
| <b>SYMPTOM DIAGNOSIS .....</b>                             | <b>57</b> |
| <b>THE LIGHT REMINDER WARNING DOES<br/>NOT SOUND .....</b> | <b>57</b> |
| Description .....  | 57        |
| Diagnosis Procedure .....                                  | 57        |

|  |           |
|--|-----------|
| <b>THE PARKING BRAKE RELEASE WARNING<br/>CONTINUES SOUNDING, OR DOES NOT<br/>SOUND .....</b> | <b>58</b> |
| Description .....  | 58        |
| Diagnosis Procedure .....  | 58        |
| <b>THE SEAT BELT WARNING CONTINUES<br/>SOUNDING, OR DOES NOT SOUND .....</b>                 | <b>59</b> |
| Description .....  | 59        |
| Diagnosis Procedure .....  | 59        |

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

#### Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000011281456

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

#### PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### **WARNING:**

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

#### Precautions for Removing Battery Terminal

INFOID:000000011564759

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

#### **NOTE:**

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

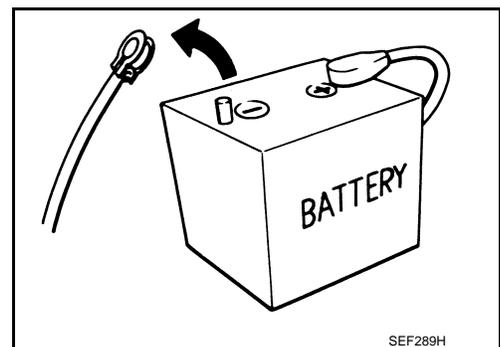
#### **NOTE:**

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

#### **NOTE:**

The removal of 12V battery may cause a DTC detection error.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
WCS  
O  
P

# COMPONENT PARTS

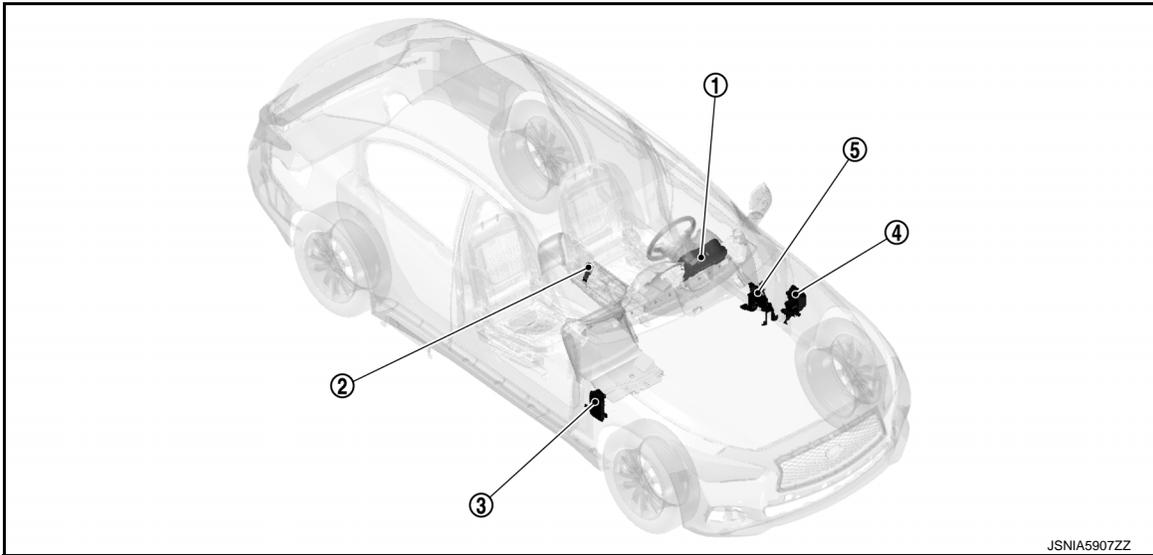
< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

INFOID:000000011281457



JSNIA5907ZZ

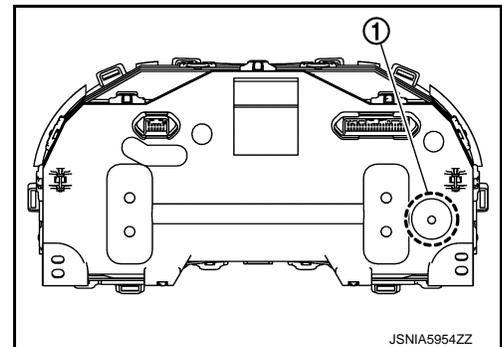
| No. | Component                                     | Function  |
|-----|---|---|
| ①   | Combination meter                             | Controls the parking brake release warning chime with the vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication and the signals from switches.   |
| ②   | Seat belt buckle switch (driver side)         | Transmits a seat belt buckle switch signal (driver side) to the combination meter.  |
| ③   | BCM   | <ul style="list-style-type: none"> <li>Based on the signals received from various units and switches, transmits the buzzer output signal to the combination meter via CAN communication.</li> <li>Refer to <a href="#">BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"</a> for detailed installation location.</li> </ul> |
| ④   | ABS actuator and electric unit (control unit) | <ul style="list-style-type: none"> <li>Transmits the each signal to the combination meter via CAN communication.</li> <li>Refer to <a href="#">WCS-5, "WARNING CHIME SYSTEM : System Description"</a>.</li> <li>Refer to <a href="#">BRC-10, "Component Parts Location"</a> for detailed installation location.</li> </ul>        |
| ⑤   | Parking brake switch                          | Transmits a parking brake switch signal to the combination meter.   |

#### Combination Meter

INFOID:000000011281458

The combination meter has a built-in buzzer ① and sounds the following warnings, according to signals from each switch and unit.

- ACC warning (buzzer)
- Door lock operation warning
- Light reminder warning
- OFF position warning
- P position warning (buzzer)
- Parking brake release warning chime
- Seat belt warning
- Take away warning (buzzer)



JSNIA5954ZZ

# SYSTEM

< SYSTEM DESCRIPTION >

## SYSTEM

### WARNING CHIME SYSTEM

#### WARNING CHIME SYSTEM : System Description

INFOID:0000000011281459

#### DESCRIPTION

##### Combination Meter

The combination meter sounds the alarm buzzer installed in the combination meter when receiving the buzzer output signal transmitted from each unit.

##### BCM

BCM receives signals from various units and transmits a buzzer output signal to the combination meter via CAN communication if it judges that the warning buzzer should be activated.

#### WARNING CHIME FUNCTION LIST

| Warning functions                   | Reference   |
|-------------------------------------|---|
| ACC warning (buzzer)                | <a href="#">WCS-7, "WARNING CHIME : ACC Warning (Buzzer)"</a>                 |
| Door lock operation warning         | <a href="#">WCS-8, "WARNING CHIME : Door Lock Operation Warning"</a>          |
| Light reminder warning (buzzer)     | <a href="#">WCS-9, "WARNING CHIME : Light Reminder Warning (Buzzer)"</a>      |
| OFF position warning                | <a href="#">WCS-11, "WARNING CHIME : OFF Position Warning"</a>                |
| P position warning (buzzer)         | <a href="#">WCS-13, "WARNING CHIME : P Position Warning (Buzzer)"</a>         |
| Parking brake release warning chime | <a href="#">WCS-15, "WARNING CHIME : Parking Brake Release Warning Chime"</a> |
| Seat belt warning                   | <a href="#">WCS-17, "WARNING CHIME : Seat Belt Warning"</a>                   |
| Take away warning (buzzer)          | <a href="#">WCS-18, "WARNING CHIME : Take Away Warning (Buzzer)"</a>          |

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

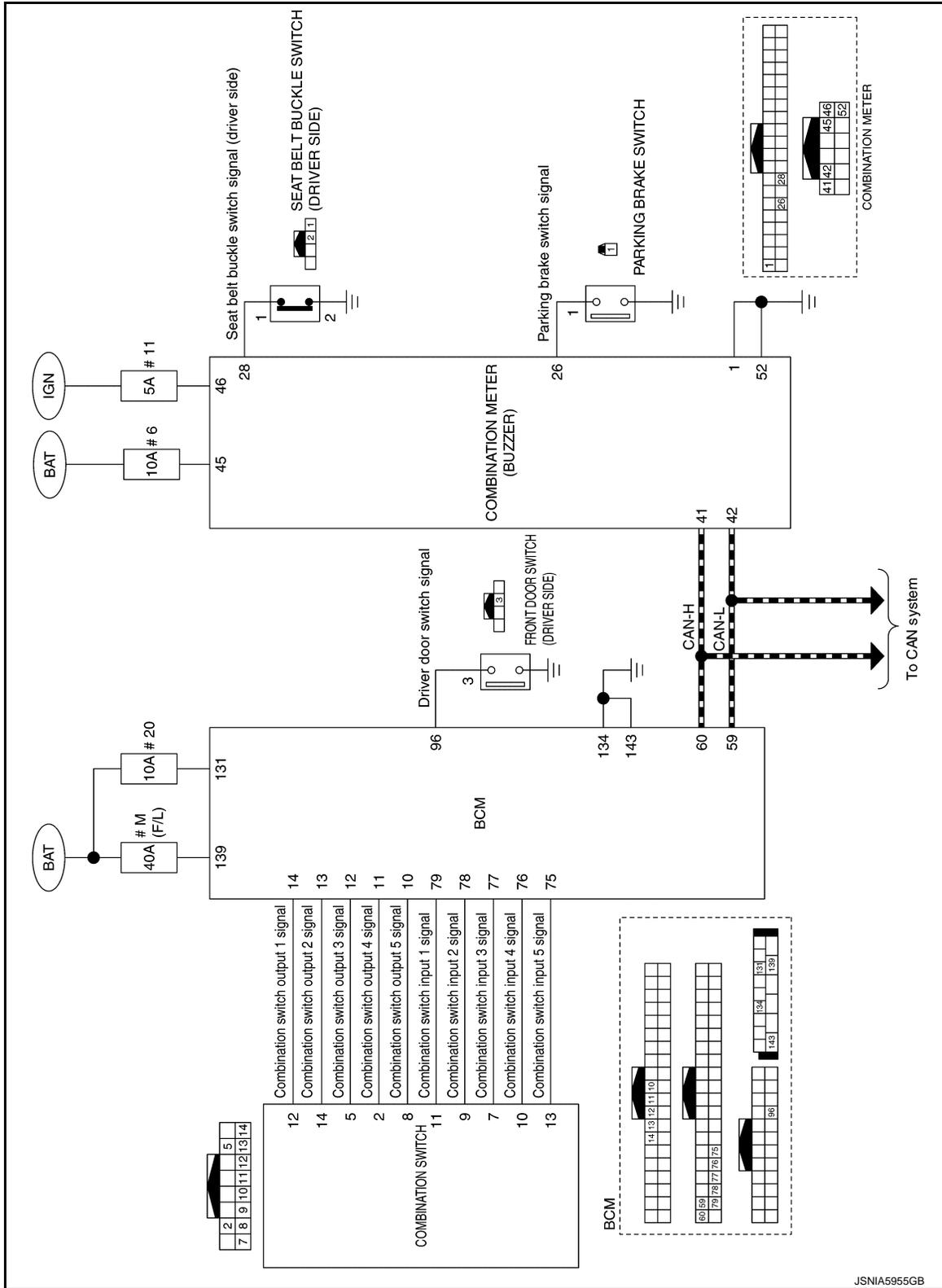
WCS

# SYSTEM

< SYSTEM DESCRIPTION >

## WARNING CHIME SYSTEM : Circuit Diagram

INFOID:000000011281460



JSNIA5955GB

## WARNING CHIME SYSTEM : Fail-Safe

INFOID:000000011281461

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

| Function | Specifications                                    |
|----------|---|
| Buzzer   | The buzzer turns OFF by suspending communication. |

# SYSTEM

< SYSTEM DESCRIPTION >

## WARNING CHIME

### WARNING CHIME : ACC Warning (Buzzer)

INFOID:0000000011281462

#### PURPOSE

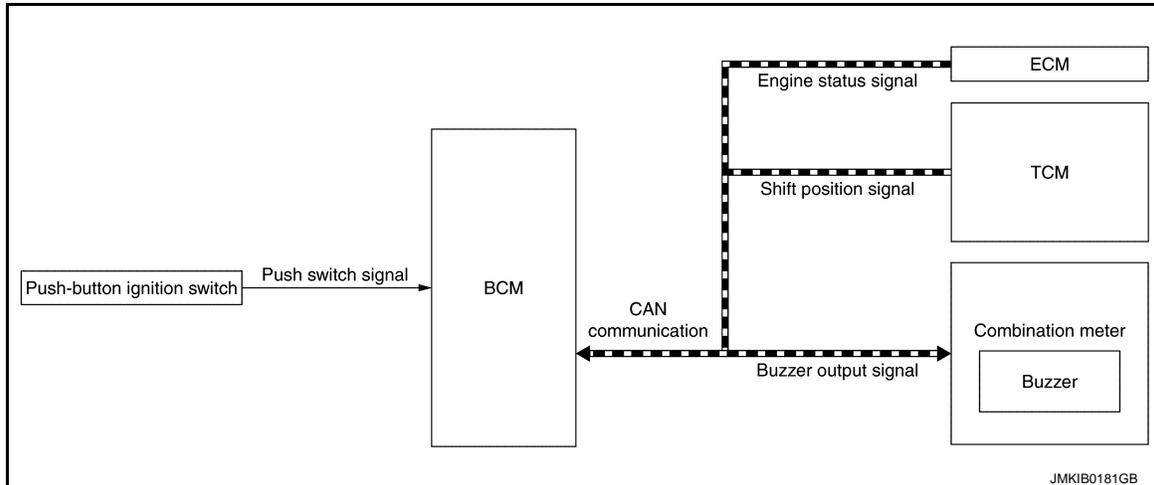
When the P position warning is canceled, an alarm warns the driver that the ignition switch is in the ACC position.

#### SYNCHRONIZATION WITH WARNING/INDICATOR (INFORMATION DISPLAY)

Synchronization is applied.

Refer to [DLK-34. "INFORMATION DISPLAY \(COMBINATION METER\) : ACC Warning \(Information Display\)"](#).

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, shift position signal from TCM via CAN communication, and engine status signal from ECM.
- When BCM judges that warning the driver is required, buzzer output signal is transmitted by BCM to combination meter via CAN communication.
- When combination meter receives buzzer output signal, warning buzzer operates.

#### WARNING OPERATING CONDITION

The following operations are performed while P position warning (for internal) is operated.

- Ignition switch is turned to ACC, and then shift position is shifted to P.
- Ignition switch is turned to ON after the above operation.

#### WARNING CANCEL CONDITION

When any of the following conditions are satisfied.

- Shift position is shifted to a position other than P while ACC warning is operated.
- Ignition position is turned to OFF or LOCK.
- Start engine.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

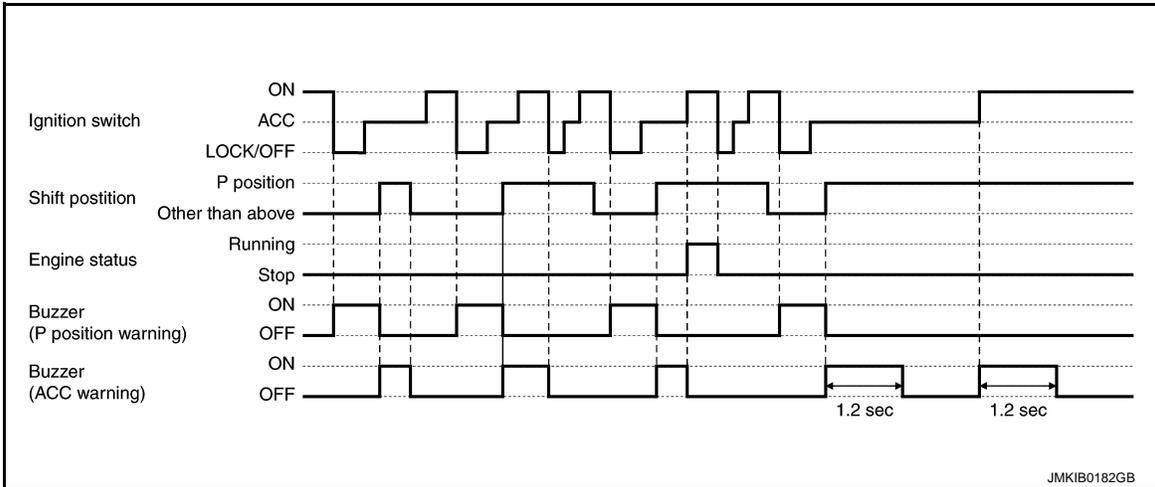
WCS

O  
P

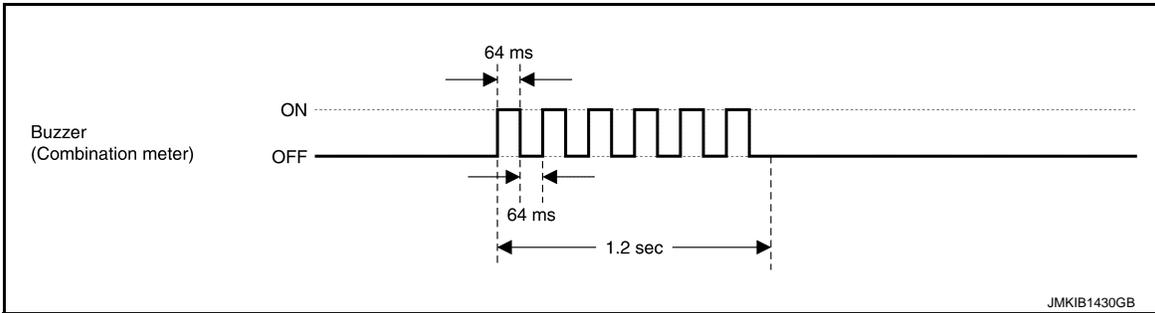
# SYSTEM

## < SYSTEM DESCRIPTION >

### TIMING CHART



### SOUND SPECIFICATION



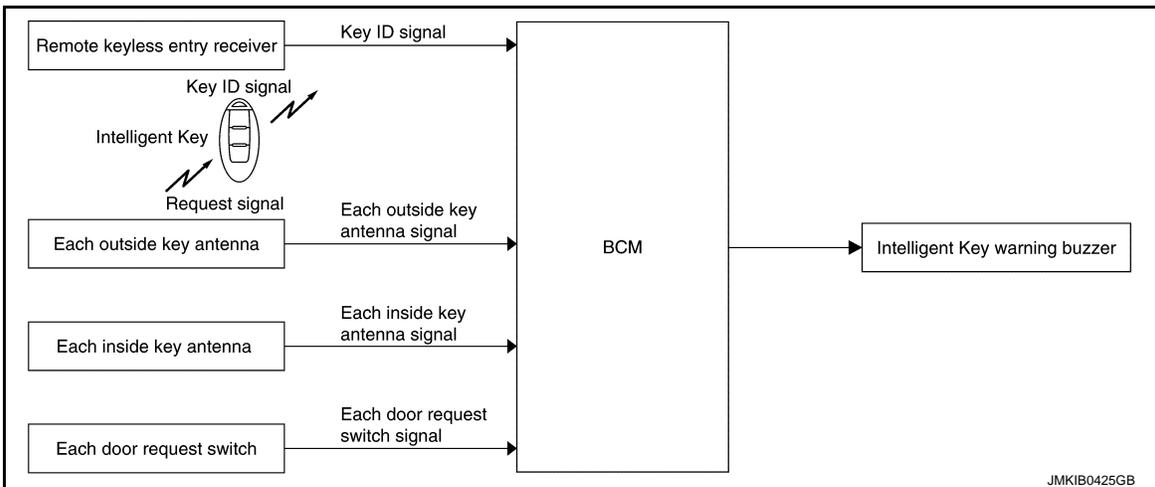
### WARNING CHIME : Door Lock Operation Warning

INFOID:000000011281463

#### PURPOSE

Door lock operation warning warns the driver that door cannot be locked because of inappropriate operation, when door lock operation using Intelligent Key button operation or door request switch is not performed normally.

#### SYSTEM DIAGRAM



#### SIGNAL PATH

- BCM judges whether or not warning the driver is required, according to each switch signal, inside key antenna signal and outside key antenna signal.
- When BCM judges that warning the driver is required, Intelligent Key warning buzzer operates.

#### WARNING OPERATING CONDITION

All doors do not lock using Intelligent Key or each door request switch.

# SYSTEM

## < SYSTEM DESCRIPTION >

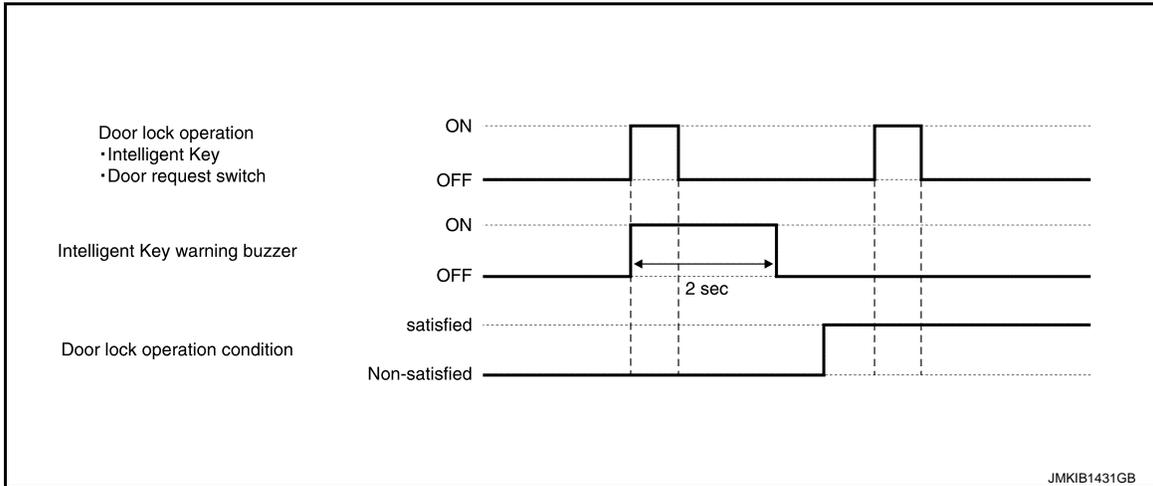
- Intelligent Key operation condition  
Refer to [DLK-31, "REMOTE KEYLESS ENTRY FUNCTION : System Description"](#).
- Door request switch operation condition  
Refer to [DLK-23, "DOOR LOCK FUNCTION : System Description"](#).

### WARNING CANCEL CONDITION

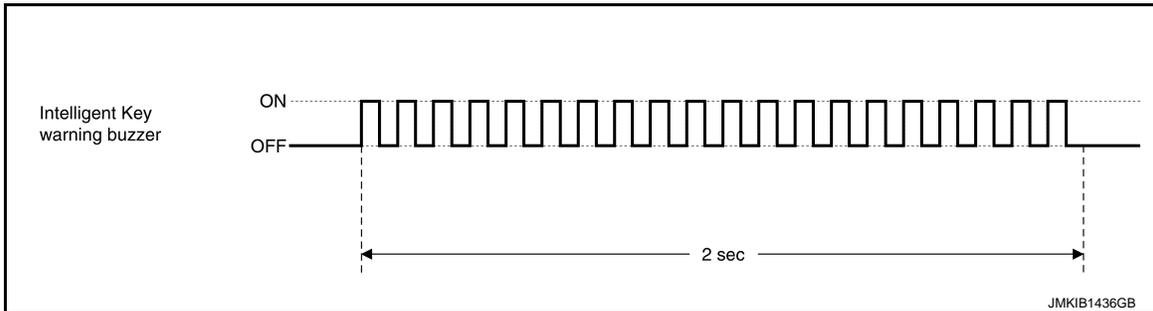
When any of the following conditions are satisfied.

- 2 seconds are passed.
- All doors are locked or unlocked by Intelligent Key or each door request switch

### TIMING CHART



### SOUND SPECIFICATION



### WARNING CHIME : Light Reminder Warning (Buzzer)

INFOID:0000000011281464

#### PURPOSE

Light reminder warning (buzzer) warns the driver of egression from the vehicle while ignition switch is OFF and lamp is in ON status.

#### SYNCHRONIZATION WITH WARNING/INDICATOR (INFORMATION DISPLAY)

For warning/indicator (information display), refer to [EXL-44, "INFORMATION DISPLAY \(COMBINATION METER\) : Light Reminder Warning \(Information Display\)"](#).

#### OPERATION AT COMBINATION METER CAN COMMUNICATION CUT-OFF OR UNUSUAL SIGNAL

For actions on CAN communications blackout in the combination meter, refer to [WCS-6, "WARNING CHIME SYSTEM : Fail-Safe"](#).

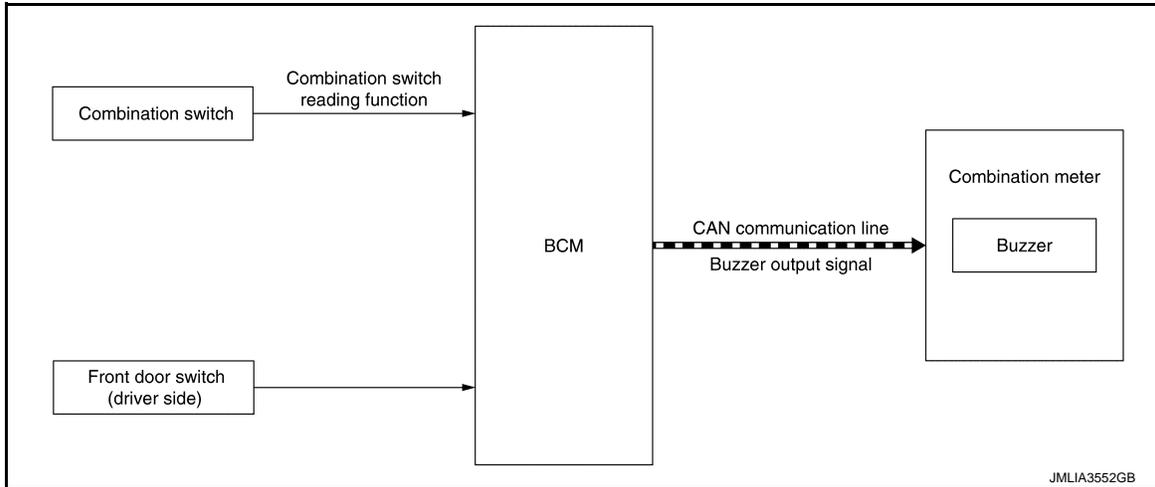
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# SYSTEM

## < SYSTEM DESCRIPTION >

### SYSTEM DIAGRAM



### SIGNAL PATH

- BCM reads status of combination switch.
- BCM judges light reminder warning (buzzer) by lighting switch status and driver door switch (driver side) signal. BCM transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives buzzer output signal, combination meter sounds warning buzzer.

### WARNING OPERATING CONDITION

When all of the following conditions are satisfied.

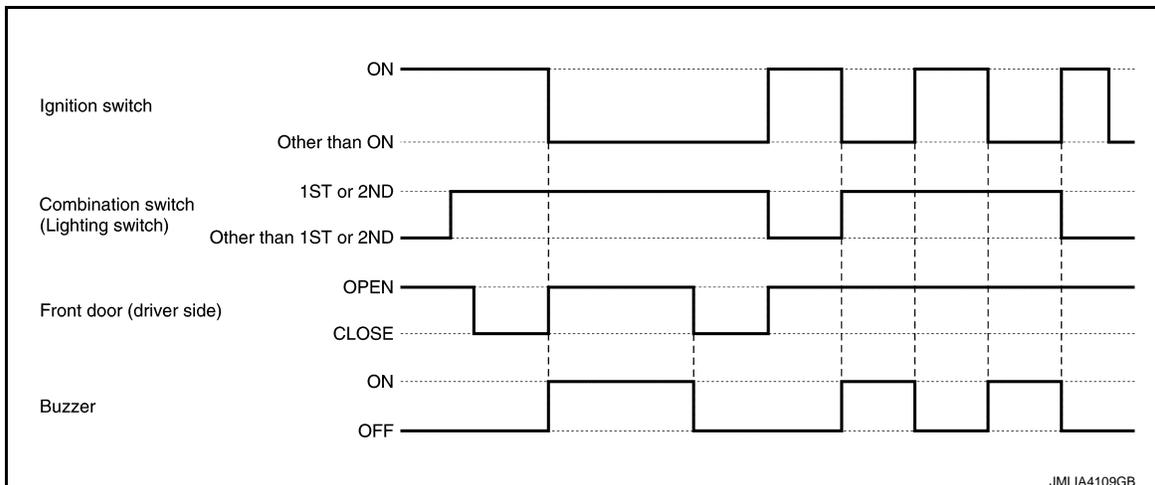
- Ignition switch other than ON
- Lighting switch 1ST or 2ND
- Front door (driver side) OPEN [front door switch (driver side) ON]

### WARNING CANCEL CONDITION

When any of the following conditions are satisfied.

- Ignition switch ON
- Lighting switch other than 1ST or 2ND
- Front door (driver side) CLOSE [front door switch (driver side) OFF]

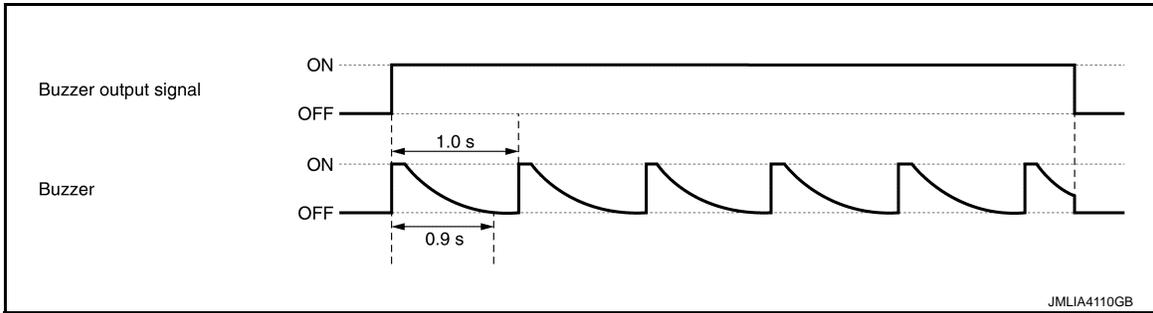
### TIMING CHART



# SYSTEM

## < SYSTEM DESCRIPTION >

### SOUND SPECIFICATION



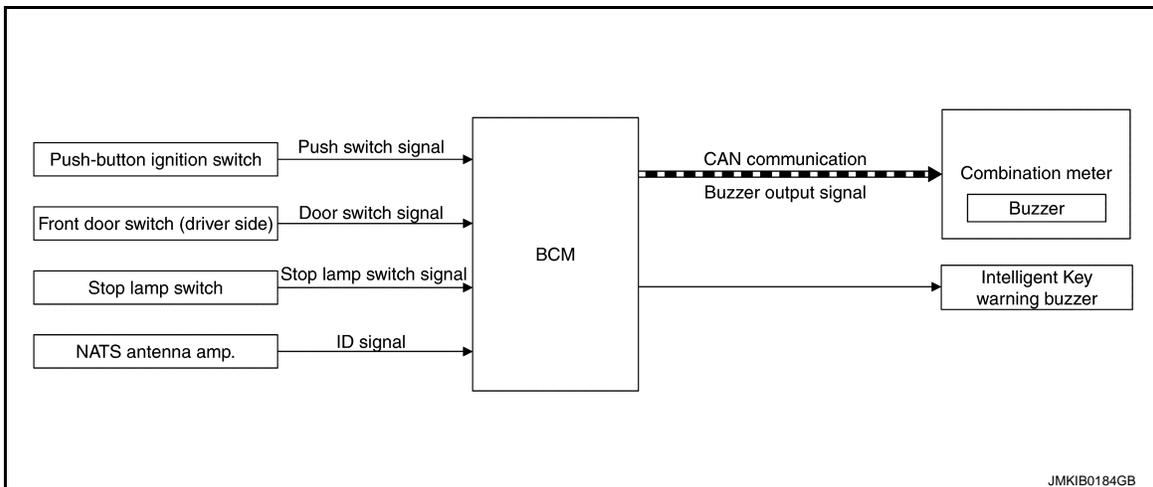
### WARNING CHIME : OFF Position Warning

INFOID:0000000011281465

#### PURPOSE

OFF position warning warns the driver of egression from the vehicle while steering lock is not applied.

#### SYSTEM DIAGRAM



#### SIGNAL PATH

For internal

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, door switch signal from front door switch (driver side), and ID verification result.
- BCM, when it judges that warning to the driver is required, transmits buzzer output signal to combination meter via CAN communication.
- When combination meter receives buzzer output signal, warning buzzer operates.

For external

- BCM judges whether or not warning to the driver is required, according to door switch signal from front door switch (driver side) while OFF position warning (for internal) is operated.
- When BCM judges that warning the driver is required, Intelligent Key warning buzzer operates.

#### WARNING OPERATING CONDITION

For internal

When any of the following conditions are satisfied.

- Condition A
  - Ignition switch: ACC position
  - Front door switch (driver side) is ON (Driver door is open)
- Condition B
  - Ignition switch is turned from ON to OFF while driver door is open.
- Condition C
  - When Ignition switch is in LOCK or OFF position, Intelligent Key backside is contacted to push-button ignition switch while brake pedal is depressed (when Intelligent Key battery is discharged).
  - Front door switch (driver side) is ON (Driver door is open)

For external

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

# SYSTEM

## < SYSTEM DESCRIPTION >

- Driver door is closed while OFF position warning (for internal) is operated.

**NOTE:**

This warning only operates when driver door is closed after each warning is operated according to the sequential order of P position warning, ACC warning, and then OFF position warning (for internal).

### WARNING CANCEL CONDITION

For internal

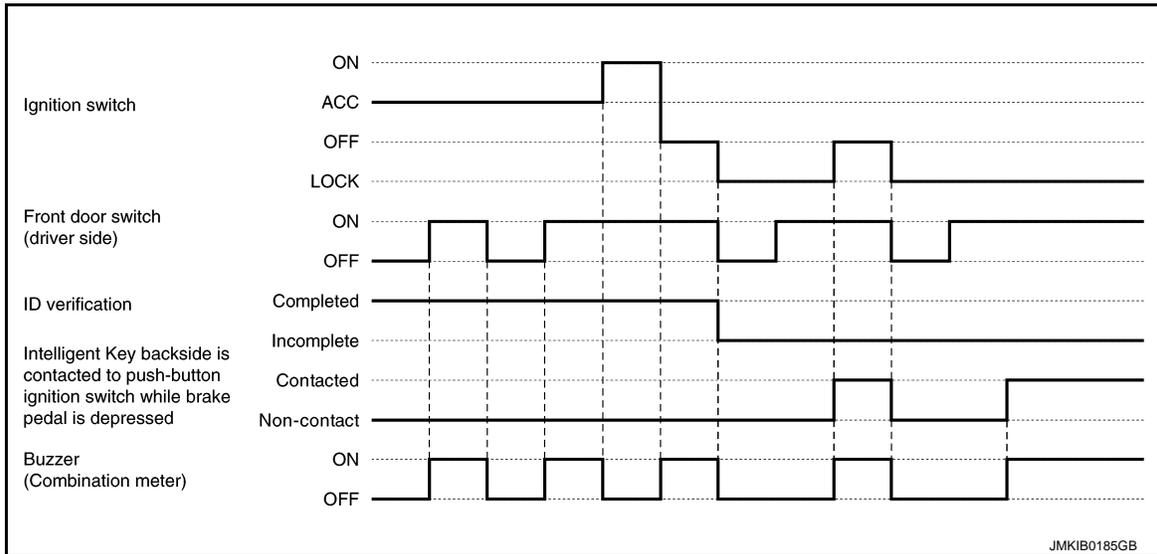
- Any of the warning operating conditions are no longer satisfied.

For external

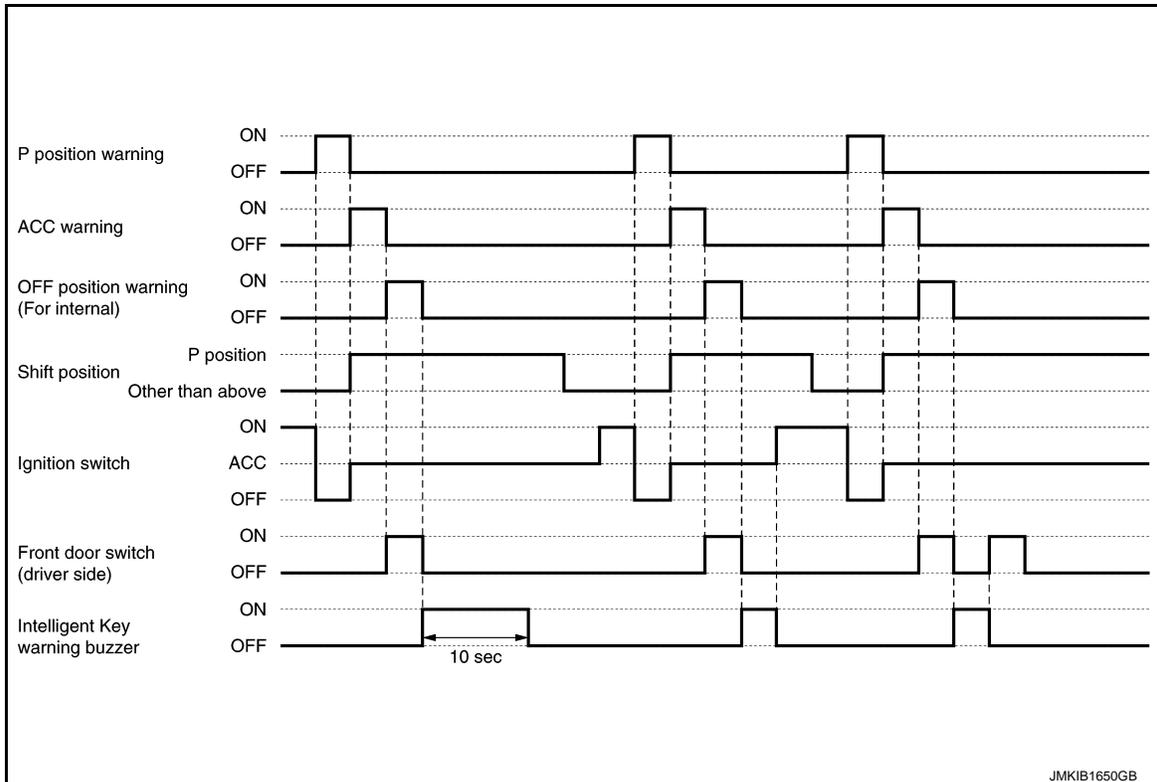
- When any of the following conditions are satisfied.
  - Ignition switch is ON
  - Front door switch (driver side) is ON (Driver door is open)

### TIMING CHART

For internal



For external

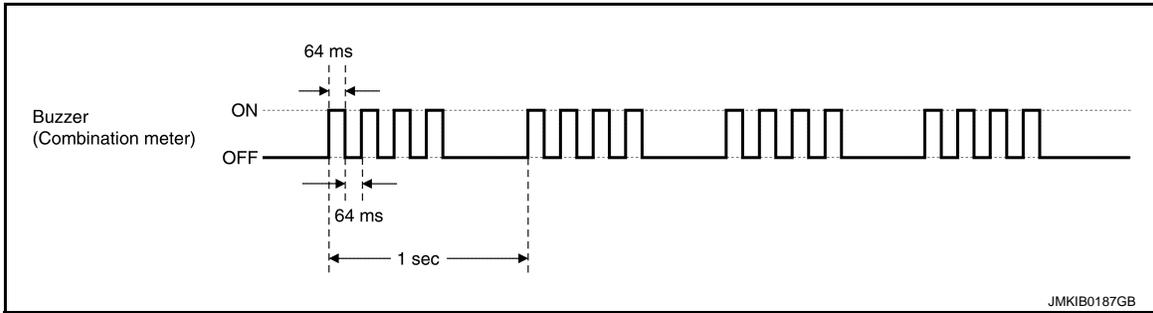


# SYSTEM

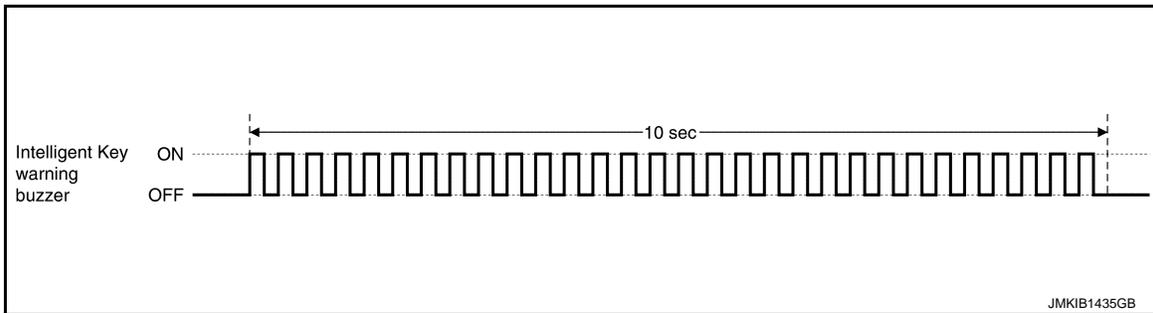
## < SYSTEM DESCRIPTION >

### SOUND SPECIFICATION

For internal



For external



### WARNING CHIME : P Position Warning (Buzzer)

INFOID:000000011281466

#### PURPOSE

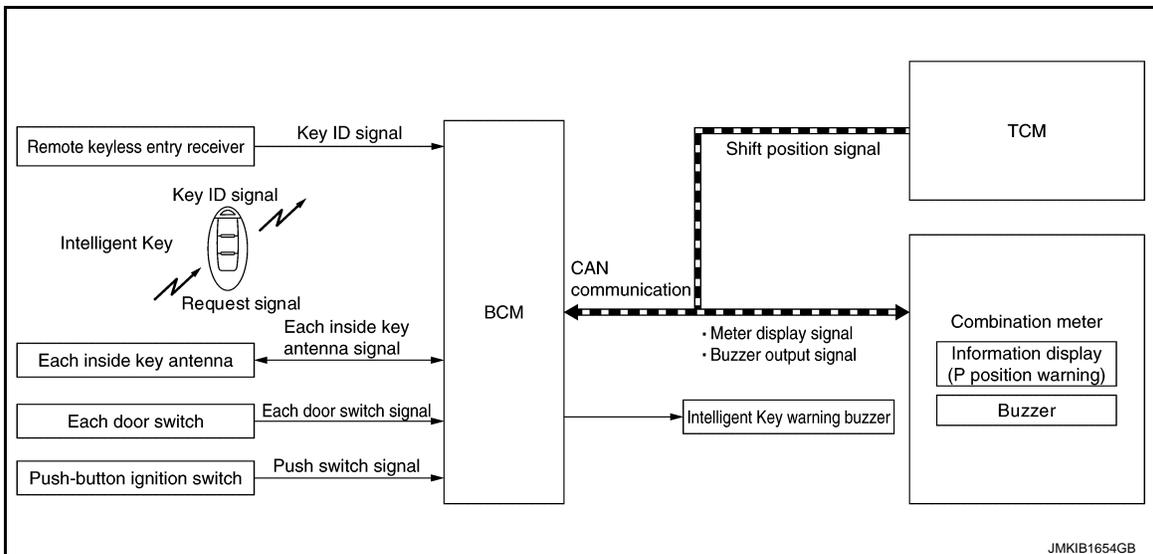
P position warning warns the driver of egression from the vehicle while shift is other than P position.

#### SYNCHRONIZATION WITH WARNING/INDICATOR (INFORMATION DISPLAY)

Synchronization is applied.

Refer to [DLK-42. "INFORMATION DISPLAY \(COMBINATION METER\) : P Position Warning \(Information Display\)"](#).

#### SYSTEM DIAGRAM



#### SIGNAL PATH

For internal

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, inside key antenna signal from each inside key antenna, and shift position signal from TCM via CAN communication.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# SYSTEM

## < SYSTEM DESCRIPTION >

- When BCM judges that warning the driver is required, BCM transmits buzzer output signal and meter display signal to combination meter via CAN communication.
- When combination meter receives buzzer output signal and meter display signal, buzzer and information display operate.

For external

- BCM judges whether or not warning the driver is required, according to door switch signal from each door switch and inside key antenna signal from each inside key antenna while P position warning (for internal) is operated.
- When BCM judges that warning the driver is required, Intelligent key buzzer operates.

## WARNING OPERATING CONDITION

For internal

When all of the following conditions are satisfied.

- Shift position is other than P
- Ignition switch is turned from ON to OFF

For external

When all of the following conditions are satisfied.

- P position warning (for internal) is in operation
- A registered Intelligent Key is not detected in passenger room
- Door switch is switched from ON to OFF (Open door is closed)

## WARNING CANCEL CONDITION

For internal

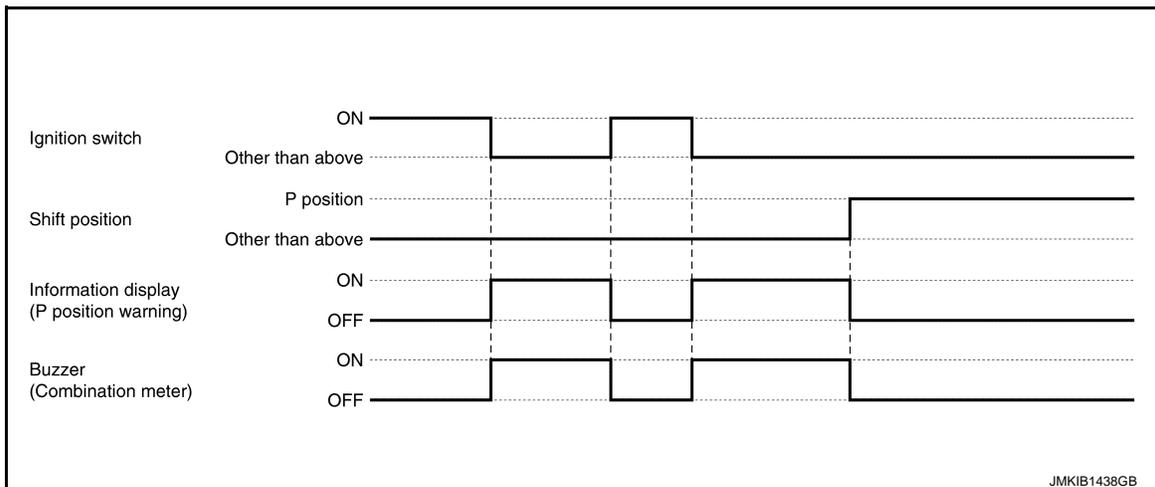
- When any of the following conditions are satisfied.
  - Shift position is P
  - Ignition switch is ON

For external

- When any of the following conditions are satisfied.
  - Ignition switch is ON
  - Shift position is P
  - A registered Intelligent Key is detected in passenger room
  - When ignition switch is in LOCK or OFF position, Intelligent Key backside is contacted to engine switch while brake pedal is depressed (when Intelligent Key battery is discharged)

## TIMING CHART

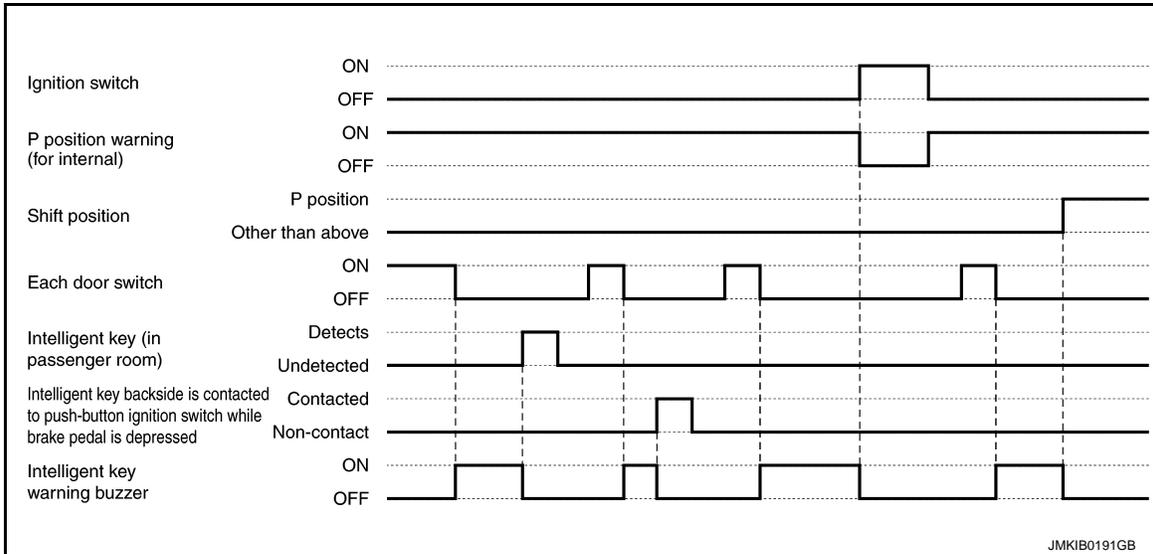
For internal



# SYSTEM

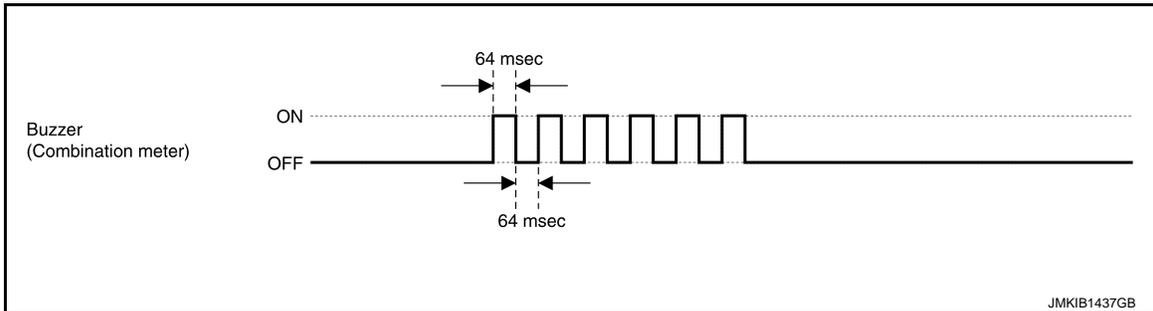
## < SYSTEM DESCRIPTION >

For external

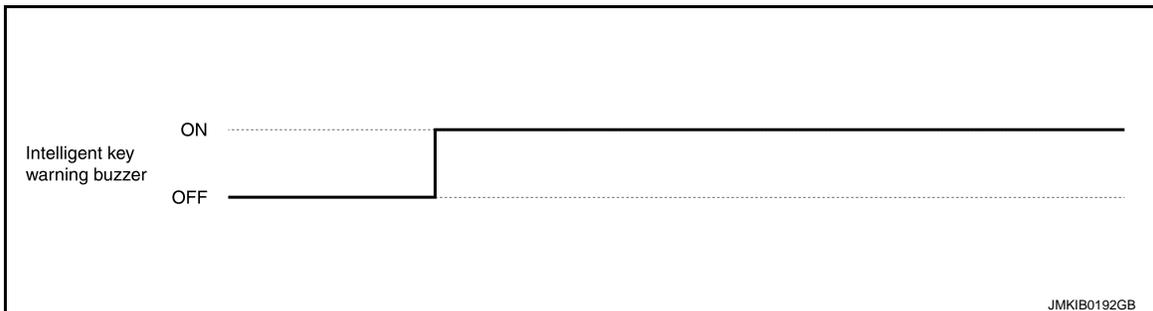


## SOUND SPECIFICATION

For internal



For external



## WARNING CHIME : Parking Brake Release Warning Chime

INFOID:000000011281467

WCS

### PURPOSE

Parking brake release warning chime warns the driver that the parking brake is left applied, by sounding the warning chime.

### SYNCHRONIZATION WITH WARNING LAMP/INDICATOR LAMP

Applicable

For warning lamp, refer to [MWI-21, "WARNING LAMPS/INDICATOR LAMPS : Brake Warning Lamp"](#).

### SYNCHRONIZATION WITH WARNING/INDICATOR (INFORMATION DISPLAY)

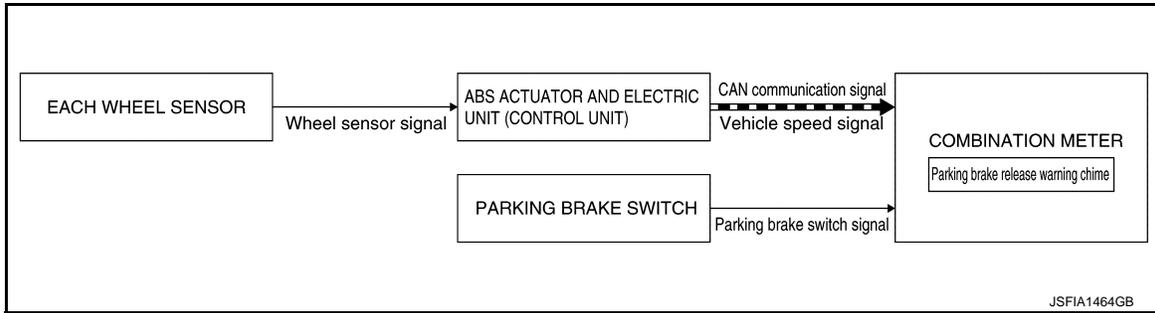
Applicable

For warning (information display), refer to [PB-4, "INFORMATION DISPLAY \(COMBINATION METER\) : Parking Brake Release Warning"](#).

# SYSTEM

## < SYSTEM DESCRIPTION >

### SYSTEM DIAGRAM



### SIGNAL PATH

- The combination meter receives a vehicle speed signal from the ABS actuator and electric unit (control unit) via CAN communication.
- The combination meter receives a parking brake signal from the parking brake switch.
- The combination meter judges that the parking brake is left applied according to the above signals, and sounds the parking brake release warning chime.

### WARNING OPERATING CONDITION

When all of the conditions listed below are satisfied:

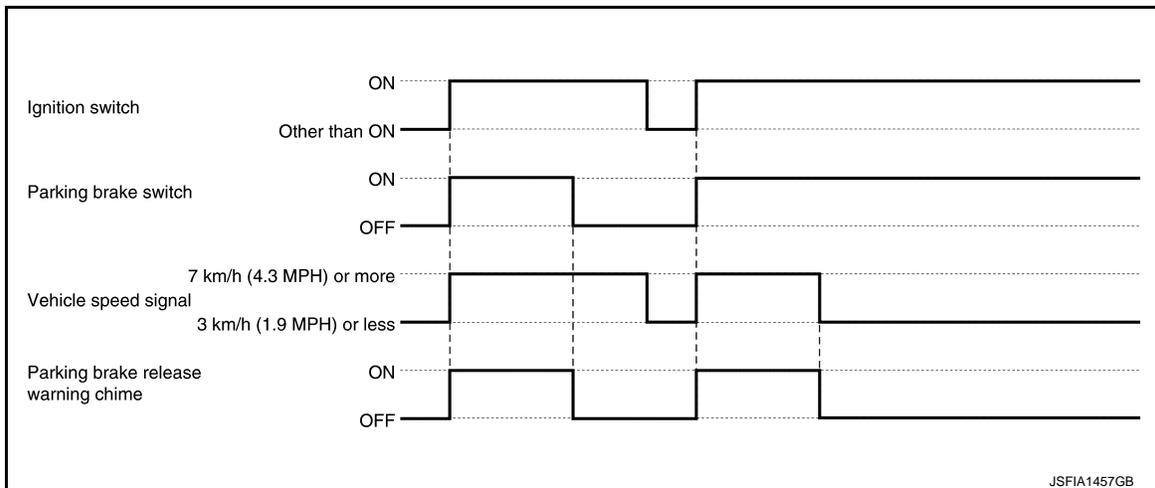
- Ignition switch is ON.
- Vehicle speed is 7 km/h (4.3 MPH) or more.
- Parking brake switch is ON. (Parking brake: applied.)

### WARNING CANCEL CONDITION

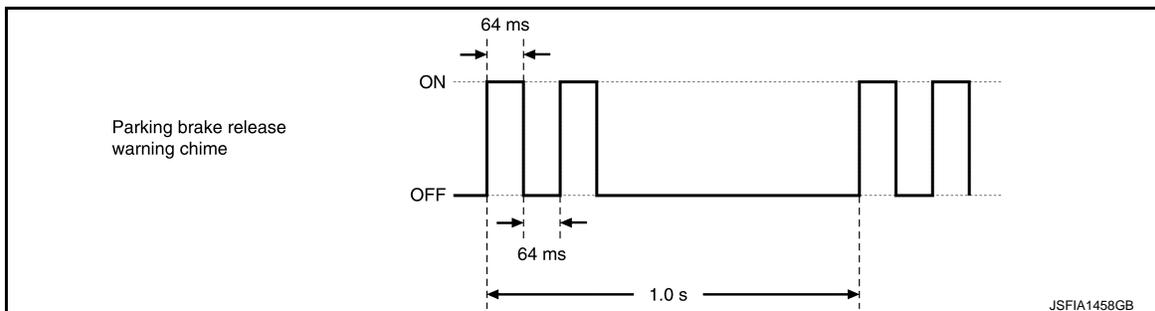
When any of the conditions listed below is satisfied:

- Ignition switch is in a position other than ON.
- Vehicle speed is 3 km/h (1.9 MPH) or less.
- Parking brake switch is OFF. (Parking brake: Released.)

### TIMING CHART



### SOUND SPECIFICATION



# SYSTEM

< SYSTEM DESCRIPTION >

## WARNING CHIME : Seat Belt Warning

INFOID:000000011281468

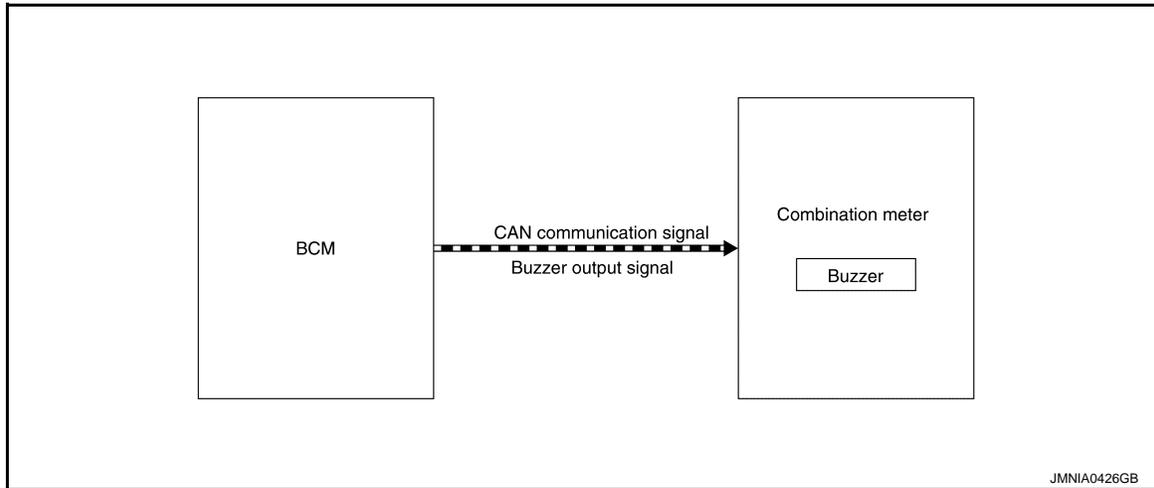
### DESCRIPTION

Seat belt warning lamp warns the driver that driver or passenger seat belt is not fastened.

### SYNCHRONIZATION WITH WARNING LAMP/INDICATOR LAMP

For warning lamp, refer to [MWI-39, "WARNING LAMPS/INDICATOR LAMPS : Seat Belt Warning Lamp"](#).

### SYSTEM DIAGRAM



### SIGNAL PATH

BCM judges seat belt reminder warning and transmits buzzer output signal to combination meter via CAN communication. Combination meter sounds buzzer when buzzer output signal is received.

### WARNING OPERATION CONDITIONS

Combination meter operates seat belt reminder warning buzzer when all of the following conditions are satisfied.

#### Driver seat belt

- Ignition switch is ON.
- Driver seat belt is not fastened.

#### Passenger seat belt

- Ignition switch is ON.
- A person sits in the passenger seat.
- Passenger seat belt is not fastened.

### WARNING CANCEL CONDITIONS

Combination meter cancels seat belt reminder warning buzzer when all of the following conditions are satisfied.

- Ignition switch is other than ON.
- Driver seat belt is fastened.
- Passenger seat belt is fastened or a person does not sit in the passenger seat.
- Approximately 6 seconds are passed since warning start.

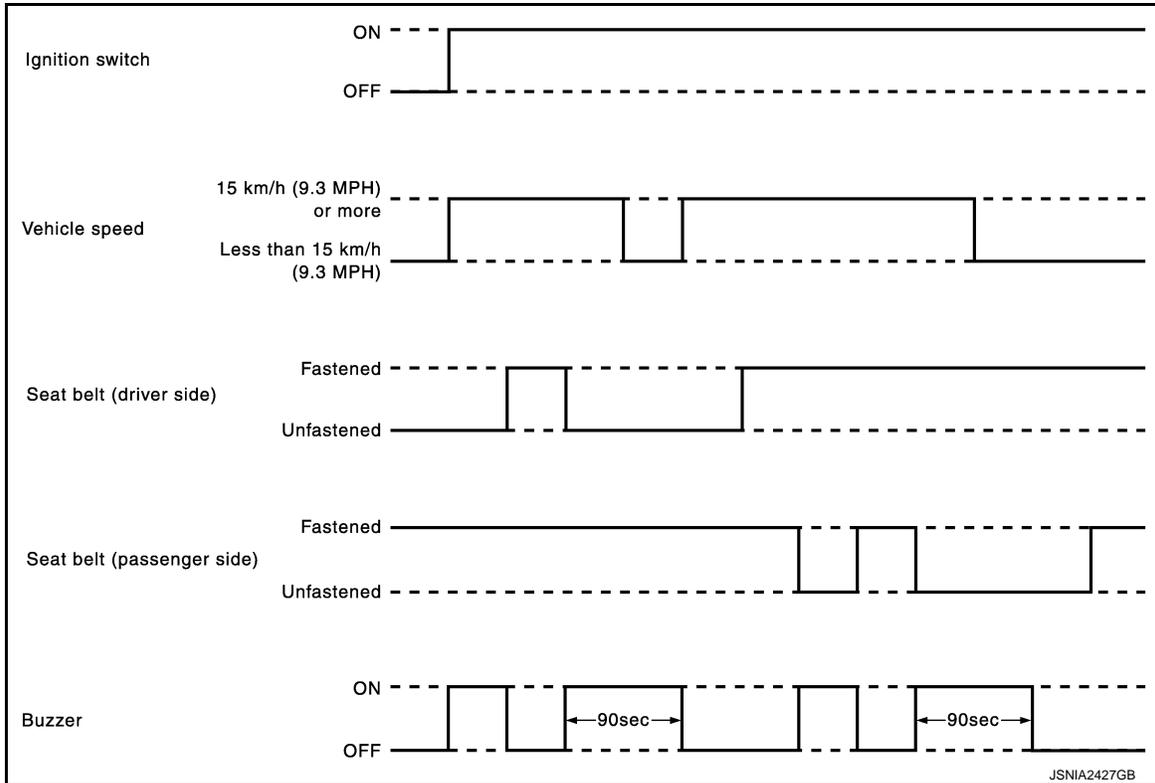
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

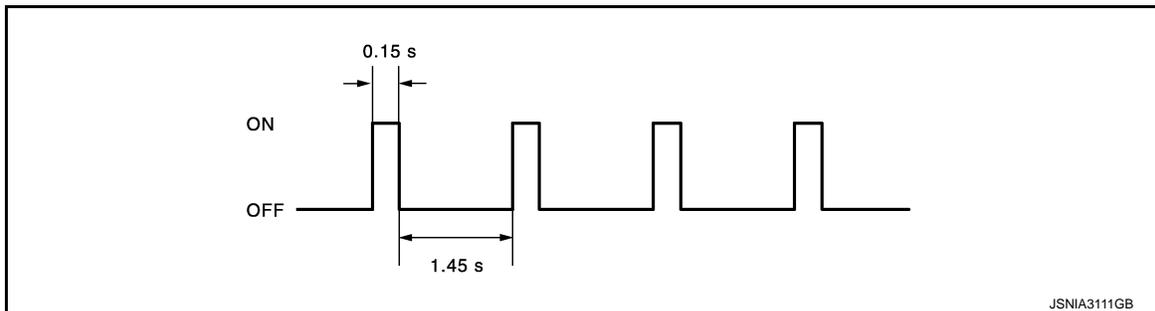
# SYSTEM

## < SYSTEM DESCRIPTION >

### TIMING CHART



### SOUND SPECIFICATION



### WARNING CHIME : Take Away Warning (Buzzer)

INFOID:000000011281469

#### PURPOSE

Take away warning warns the driver that Intelligent Key is removed from passenger room, according to the vehicle status.

#### SYNCHROIZATION WITH WARNING/INDICATOR (INFORMATION DISPLAY)

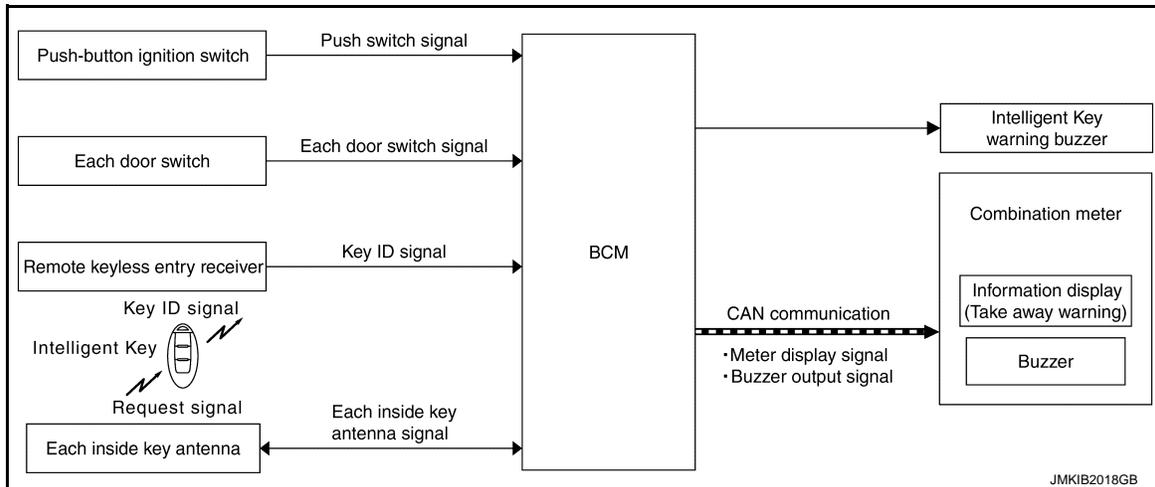
Synchronization is applied.

Refer to [DLK-43, "INFORMATION DISPLAY \(COMBINATION METER\) : Take Away Warning \(Information Display\)"](#).

# SYSTEM

## < SYSTEM DESCRIPTION >

### SYSTEM DIAGRAM



### SIGNAL PATH

Door status changes from open to close

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, door switch signal from each door switch, and inside key antenna signal from each inside key antenna.
- When BCM judges that warning the driver is required, buzzer output signal and meter display signal are transmitted by BCM to combination meter via CAN communication.
- Combination meter, when it receives buzzer output signal and meter display signal, operates buzzer and information display. BCM simultaneously operates Intelligent Key warning buzzer.

Door status is open

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, door switch signal from each door switch, and inside key antenna signal from each inside key antenna.
- BCM, when it judges that warning to the driver is required, transmits meter display signal to combination meter via CAN communication.
- When combination meter receives meter display signal, information display operates.

Push-button ignition switch is pressed

- BCM judges whether or not warning the driver is required, according to push switch signal from push-button ignition switch, door switch signal from each door switch and inside key antenna signal from inside key antenna.
- When BCM judges that warning the driver is required, buzzer output signal and meter display signal are transmitted by BCM to combination meter via CAN communication.
- Combination meter, when it receives buzzer output signal and meter display signal, operates buzzer and information display.

### WARNING OPERATING CONDITION

Door status changes from open to close

When all of the following conditions are satisfied

- Ignition switch is other than LOCK and OFF
- Door switch is switched from ON to OFF (Open door is closed)
- A registered Intelligent Key is not detected in passenger room

Door status is open

When all of the following conditions are satisfied

- Ignition switch is other than LOCK and OFF
- Door switch is ON (Door is open)
- A registered Intelligent Key is not detected in passenger room

Push-button ignition switch is pressed

When all of the following conditions are satisfied

- Ignition switch is OFF or ACC
- A registered Intelligent Key is not detected in passenger room

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

WCS

O  
P

# SYSTEM

## < SYSTEM DESCRIPTION >

- Push-button ignition switch operation is performed

### WARNING CANCEL CONDITION

Door status changes from open to close

- When any of the following conditions are satisfied
  - Ignition switch is in LOCK position
  - A registered Intelligent Key is detected in passenger room
  - Since warning start, 15 seconds are passed while battery saver system is in operation

Door status is open

A registered Intelligent Key is detected in passenger room

Push-button ignition switch is pressed

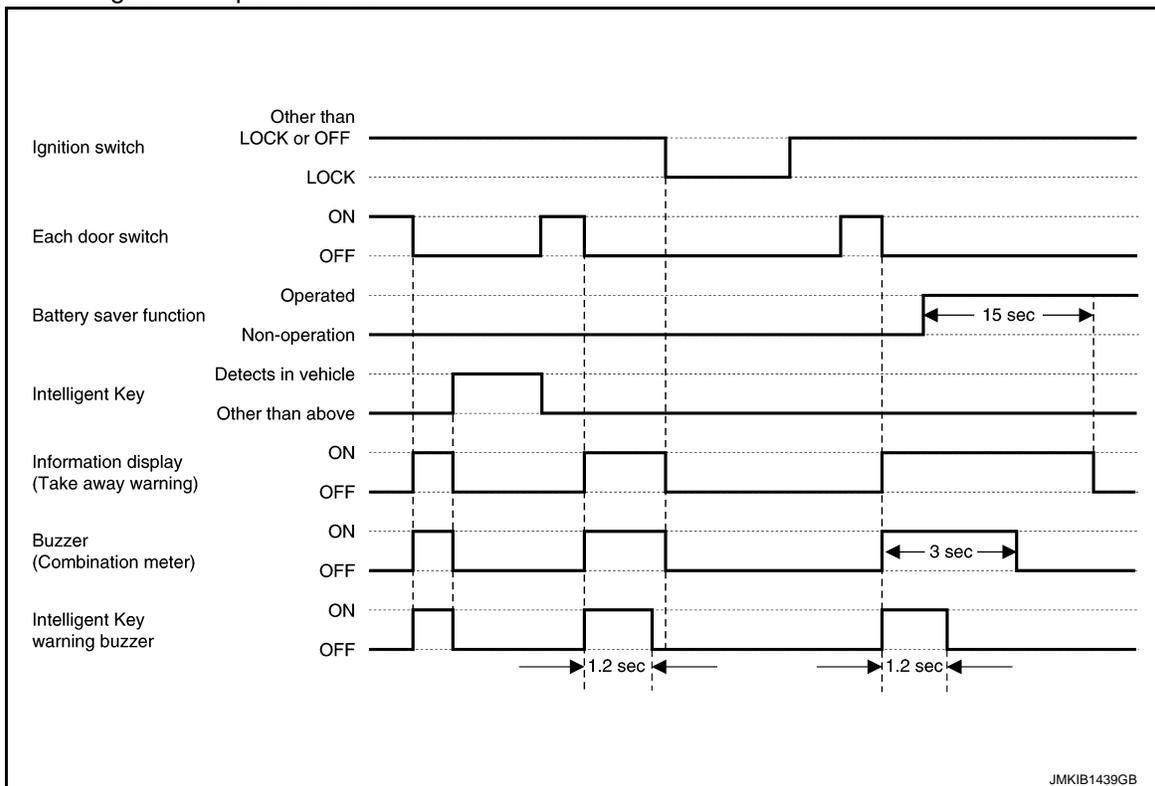
- When any of the following conditions are satisfied
  - Ignition switch is in LOCK position
  - A registered Intelligent Key is detected in passenger room

### NOTE:

For battery saver system, refer to [PCS-43, "POWER DISTRIBUTION SYSTEM : System Description"](#).

### TIMING CHART

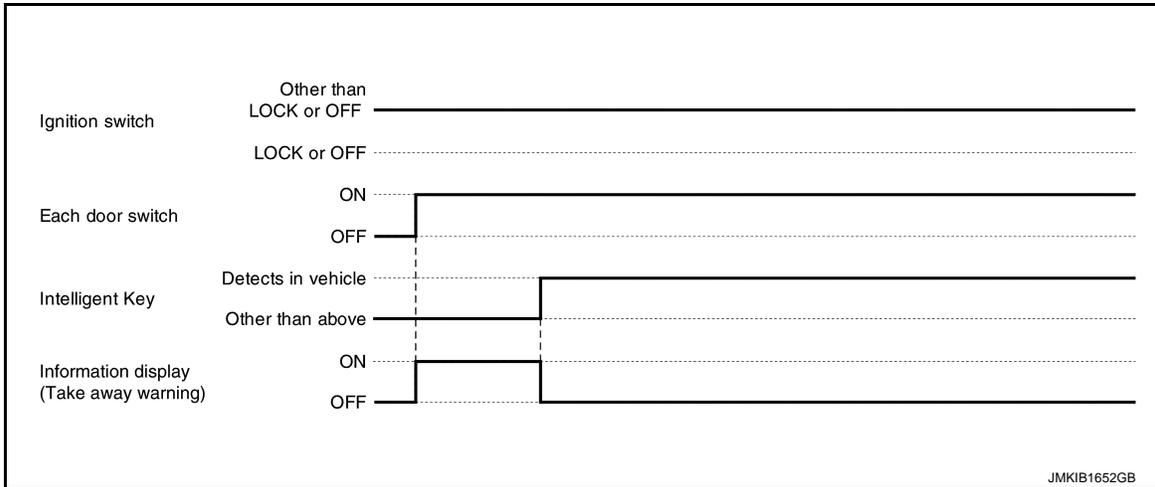
Door status changes from open to close



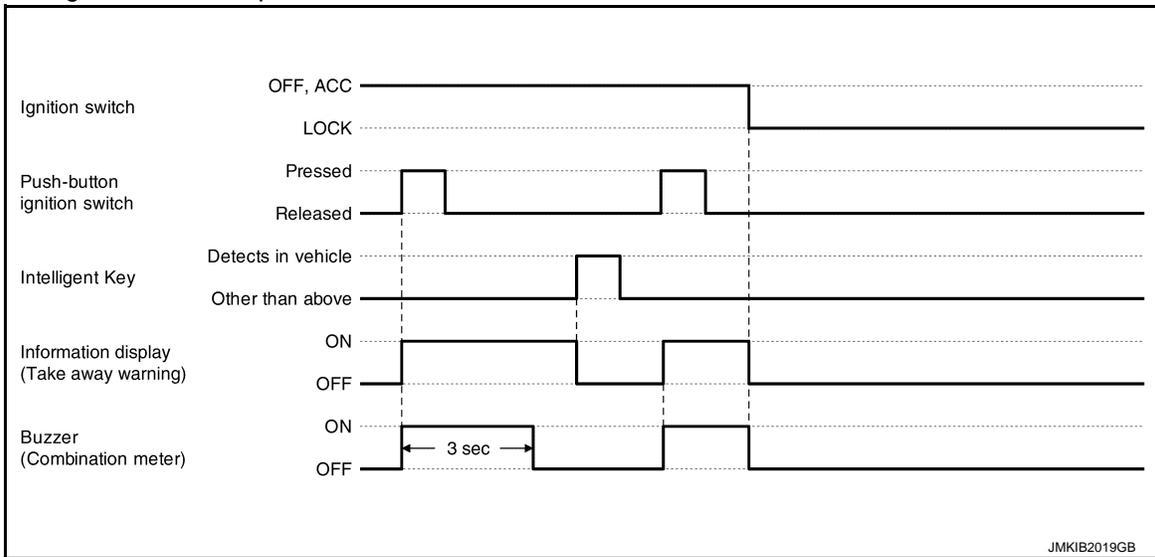
# SYSTEM

## < SYSTEM DESCRIPTION >

Door status is open

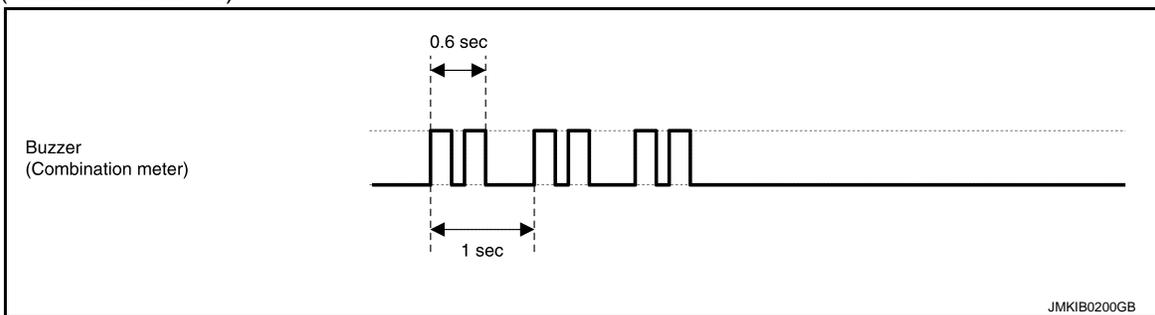


Push-button ignition switch is pressed



## SOUND SPECIFICATION

Buzzer (combination meter)



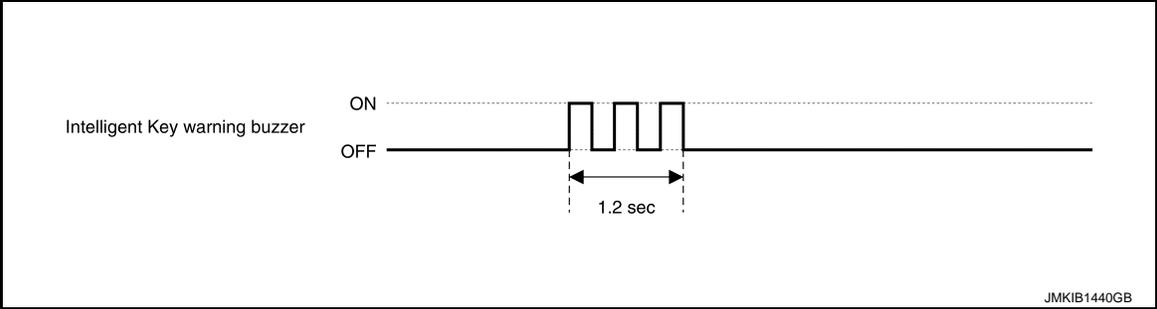
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# SYSTEM

## < SYSTEM DESCRIPTION >

### Intelligent Key warning buzzer



# DIAGNOSIS SYSTEM (COMBINATION METER)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (COMBINATION METER)

### CONSULT Function

INFOID:000000011281470

### APPLICATION ITEMS

CONSULT can perform the following diagnosis modes via CAN communication and the combination meter.

| System    | Diagnosis mode          | Description  |
|-----------|-------------------------|--|
| METER/M&A | Self Diagnostic Results | The combination meter checks the conditions and displays memorized errors. |
|           | Data Monitor            | Displays the combination meter input/output data in real time.             |
|           | Work Support            | Displays diagnosis procedure of each work item.                            |
|           | Ecu Identification      | Displays combination meter part number.                                    |
|           | Warning History         | Lighting history of the warning lamp and indicator lamp can be checked.    |

### SELF-DIAGNOSTIC RESULTS

For details, refer to [MWI-80, "DTC Index"](#).

When "CRNT" is displayed on self-diagnosis result,

- The system is presently malfunctioning.

When "PAST" is displayed on self-diagnosis result,

- System malfunction in the past is detected, but the system is presently normal.

Freeze frame data (FFD)

| Item name               | Display item   |
|-------------------------|--|
| IGN counter<br>(0 – 39) | <p>The number of times that ignition switch is turned ON after the DTC is detected is displayed.</p> <ul style="list-style-type: none"><li>• When "0" is displayed: It indicates that the system is presently malfunctioning.</li><li>• When except "0" is displayed: It indicates that system malfunction in the past is detected, but the system is presently normal.</li></ul> <p><b>NOTE:</b><br/>Each time when ignition switch is turned OFF to ON, numerical number increases in 1 → 2 → 3...38 → 39. When the operation number of times exceeds 39, the number do not increase and "39" is displayed until self-diagnosis is erased.</p> |

### WORK SUPPORT

| Work support item                       | Description  |
|---|--|
| Turn signal buzzer diagnosis            | A possible malfunction can be narrowed down by following displayed instructions. |
| Outside air temperature diagnosis       |  |
| Fuel meter diagnosis (Analog pointer)*1 |  |
| Warning/Indicator lamp diagnosis        |  |

\*1: Although a segment type fuel gauge can display work items, it is not used.

### ECU IDENTIFICATION

Combination meter part number can be read.

### DATA MONITOR

#### NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Display Item List

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

X: Applicable

| Display item [Unit]         | MAIN SIGNALS | Description  |
|-----------------------------|--------------|--|
| SPEED METER<br>[km/h]       | X            | Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication.<br><b>NOTE:</b><br>655.35 is displayed when the malfunction signal is received.   |
| SPEED OUTPUT<br>[km/h]      | X            | Vehicle speed signal value transmitted to other units via CAN communication.<br><b>NOTE:</b><br>655.35 is displayed when the malfunction signal is received.   |
| ODO OUTPUT<br>[km/h or mph] |              | Odometer signal value transmitted to other units via CAN communication.  |
| TACHO METER<br>[rpm]        | X            | Value of the engine speed signal received from ECM via CAN communication.<br><b>NOTE:</b><br>8191.875 is displayed when the malfunction signal is received.  |
| FUEL METER<br>[L]           | X            | Fuel level indicated on combination meter.   |
| W TEMP METER<br>[°C]        | X            | Value of engine coolant temperature signal is received from ECM via CAN communication.<br><b>NOTE:</b><br>215 is displayed when the malfunction signal is input.   |
| ABS W/L<br>[On/Off]         |              | Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.   |
| VDC/TCS IND<br>[On/Off]     |              | Status of VDC OFF indicator lamp detected from VDC OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.   |
| SLIP IND<br>[On/Off]        |              | Status of VDC warning lamp detected from VDC warning lamp signal received from ABS actuator and electric unit (control unit) via CAN communication.  |
| BRAKE W/L<br>[On/Off]       |              | Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication and brake fluid level switch signal from brake fluid level switch.<br><b>NOTE:</b><br>Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON. |
| DOOR W/L<br>[On/Off]        |              | Status of door open warning detected from door switch signal received from BCM via CAN communication.  |
| TRUNK/GLAS-H<br>[On/Off]    |              | Status of trunk open warning detected from trunk switch signal received from BCM via CAN communication.  |
| HI-BEAM IND<br>[On/Off]     |              | Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.  |
| TURN IND<br>[On/Off]        |              | Status of turn signal indicator lamp detected from turn indicator signal is received from BCM via CAN communication.   |
| FR FOG IND<br>[On/Off]      |              | Status of front fog lamp indicator lamp detected from front fog light request signal is received from BCM via CAN communication.   |
| RR FOG IND<br>[Off]         |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.   |
| LIGHT IND<br>[On/Off]       |              | Status of position lamp indicator lamp detected from position light request signal is received from BCM via CAN communication.   |
| OIL W/L<br>[On/Off]         |              | Status of engine oil pressure warning detected from oil pressure warning signal is received from ECM via CAN communication.  |
| MIL<br>[On/Off]             |              | Status of malfunction indicator lamp detected from malfunctioning indicator signal is received from ECM via CAN communication.   |
| BA W/L<br>[On/Off]          |              | Status of FEB warning lamp judged from FEB warning lamp signal received from ADAS control unit via CAN communication.  |
| ATC/T-AMT W/L<br>[On/Off]   |              | Status of A/T check warning judged from A/T CHECK indicator signal received from TCM via CAN communication.  |

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

| Display item [Unit]                                   | MAIN SIGNALS | Description   | A   |
|---|--------------|---|-----|
| GEAR SHIFT IND<br>[Up, Down, Up/Dwn]                  |              | Status of gear shift indicator judged from gear shift indicator signal received from ECM via CAN communication.   | A   |
| 4WD W/L<br>[On/Off]                                   |              | Status of AWD warning judged from AWD warning signal received from AWD control unit via CAN communication.  | B   |
| FUEL W/L<br>[On/Off]                                  |              | Low fuel warning lamp status detected by the identified fuel level.   | C   |
| WASHER W/L<br>[On/Off]                                |              | Status of low washer fluid warning judged from washer level switch input to combination meter.  | D   |
| AIR PRES W/L<br>[On/Off]                              |              | Status of low tire pressure warning lamp judged from low tire pressure lamp signal received from BCM via CAN communication.                             | D   |
| KEY G/Y W/L<br>[ON/Off]                               |              | Status of Intelligent Key system warning judged from meter display signal received from BCM via CAN communication.                                      | E   |
| EPS W/L<br>[On/Off]                                   |              | Status of power steering warning lamp judged from power steering warning lamp signal received from steering force control module via CAN communication. | E   |
| AFS OFF IND<br>[On/Off]                               |              | Status of AFS warning judged from AFS warning signal received from AFS control unit via CAN communication.  | F   |
| READY IND<br>[Off]                                    |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  | G   |
| SYS FAIL W/L<br>[Off]                                 |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  | G   |
| SFT POSI W/L<br>[Off]                                 |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  | H   |
| HEV BRAKE W/L<br>[Off]                                |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  | I   |
| CHAGE W/L<br>[On/Off]                                 |              | Status of charge warning lamp judged from charge warning lamp signal received from ECM via CAN communication.   | I   |
| ACC TARGET<br>[On/Off]                                |              | Status of vehicle ahead detection indicator judged from meter display signal received from ADAS control unit via CAN communication.                     | J   |
| ACC DISTANCE<br>[Off, Short, Middle, Long]            |              | Status of set distance indicator judged from meter display signal received from ADAS control unit via CAN communication.                                | J   |
| ACC SET SPEED<br>[On/Off]                             |              | Status of set vehicle speed indicator judged from meter display signal received from ADAS control unit via CAN communication.                           | K   |
| ACC UNIT<br>[On/Off]                                  |              | Status of display unit judged from meter display signal received from ADAS control unit via CAN communication.  | L   |
| SHIFT IND<br>[P, R, N, D, M1, M2, M3, M4, M5, M6, M7] |              | Status of shift position indicator judged from shift position signal received from TCM via CAN communication.   | M   |
| ECO DRIVE IND G<br>[On/Off]                           |              | Status of ECO drive indicator (green) judged from ECO drive indicator control signal received from ECM via CAN communication.                           | M   |
| FUEL CAP W/L<br>[On/Off]                              |              | Status of fuel filler cap warning display detected from fuel filler cap warning display signal received from ECM via CAN communication.                 | WCS |
| M RANGE SW<br>[On/Off]                                |              | Status of manual mode switch.   | O   |
| NM RANGE SW<br>[On/Off]                               |              | Status of non-manual mode switch.   | O   |
| AT SFT UP SW<br>[On/Off]                              |              | Status of manual mode shift up switch.  | P   |
| AT SFT DWN SW<br>[On/Off]                             |              | Status of manual mode shift down switch.  | P   |
| ST SFT UP SW<br>[On/Off]                              |              | Status of paddle shifter up switch.   | P   |

## DIAGNOSIS SYSTEM (COMBINATION METER)

### < SYSTEM DESCRIPTION >

| Display item [Unit]   | MAIN SIGNALS | Description   |
|---|--------------|---|
| ST SFT DWN SW<br>[On/Off]   |              | Status of paddle shifter down switch.   |
| PKB SW<br>[On/Off]  |              | Status of parking brake switch.   |
| BUCKLE SW<br>[On/Off]   |              | Status of seat belt buckle switch (driver side).  |
| BRAKE OIL SW<br>[On/Off]  |              | Status of brake fluid level switch.   |
| LED LMP R OPEN<br>[On/Off]  |              | Status of front combination lamp RH judged based on LED headlamp (RH) warning signal input from front combination lamp RH.  |
| LED LMP L OPEN<br>[On/Off]  |              | Status of front combination lamp LH judged based on LED headlamp (LH) warning signal input from front combination lamp LH.  |
| DISTANCE<br>[km] or [Mi]  |              | Value of distance to empty calculated by combination meter.   |
| OUTSIDE TEMP<br>[°C or °F]  |              | Ambient temperature value converted from ambient sensor signal received from ambient sensor.<br><b>NOTE:</b><br>This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.) |
| FUEL LOW SIG<br>[On/Off]  |              | Status of fuel level low warning signal to output to display control unit via AV communication.   |
| CRANKING SIG<br>[On/Off]  |              | Status of cranking judged from engine status signal received from BCM via CAN communication line.   |
| ST CNT SIG<br>[On/Off]  |              | Status of starter relay status signal received from BCM via CAN communication line.   |
| BUZZER<br>[On/Off]  | X            | Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter.   |
| BAT CIR STA<br>[Normal/Open]  |              | Status of battery power supply circuit.   |
| TPMS FLT TIRE<br>[On/Off]   |              | Status of flat tire detected from tire pressure data signal is received from BCM via CAN communication.   |
| TPMS PRESS L<br>[On/Off]  |              | Status of tire pressure low from tire pressure data signal is received from BCM via CAN communication   |
| ASCD SPD BLINK<br>[On/Off]  |              | Blinking status of ASCD set vehicle speed judged by the ASCD status signal received from ECM via CAN communication.   |
| ASCD STATUS<br>[Off, ASCD, CRUISE]  |              | Status of ASCD status display judged by the ASCD status signal received from ECM via CAN communication.   |
| ASCD REQ SPD<br>[km/h/Off]  |              | ASCD set vehicle speed value judged by the ASCD status signal received from ECM via CAN communication.  |
| HILL HOLD WARNING<br>[Off]  |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  |
| ASSIST/CHARGE GAUGE<br>[%]  |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  |
| EV IND<br>[Off]   |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  |
| ECO DRIVE NAVI<br>[LEVEL 0]   |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.  |
| LCD<br>[B&P N, B&P I, C&P N, C&P I, SFT P, BATT, NO KY, LK WN, IGN AUTO OFF, 3 min before IGN OFF, OFF] | X            | Status of engine start operation indicator lamp, shift P warning lamp and KEY warning lamp, detected from engine start operation indicator lamp signal, shift P warning lamp signal and key warning lamp signal are received from BCM via CAN communication.  |

# DIAGNOSIS SYSTEM (COMBINATION METER)

## < SYSTEM DESCRIPTION >

| Display item [Unit]  | MAIN SIGNALS | Description  |        |
|--|--------------|--|--------|
| STRG SW INPUT<br>[SW1-SW10, Off]   |              | Status of steering switch.   | A      |
| ITS SONER SET OUTPUT<br>[FCW ON/OFF, LDW ON/OFF, BSW ON/OFF, DCA ON/OFF/HIGH/MID/LOW, LDP ON/OFF/T MID/T LATE, BSI ON/BRIGHT/STD/DARK, BCI IGN ON/OFF, IBA ON/OFF, BCI AUTO ON/OFF, NO SW ST ] |              | Status of warning systems indicator or dynamic driver assistance systems indicator judged by the meter display signal received from ADAS control unit via CAN communication. | B<br>C |
| CHASSIS CONTROL WARN<br>[On/Off]   |              | Status of chassis control warning from chassis control malfunction signal is received form chassis control module via CAN communication.                                     | D      |
| LOW LI-ION BAT CHG WARN<br>[Off]   |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.   | E      |
| VSP OFF IND<br>[Off]   |              | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.   |        |
| HI-BEAM ASST IND<br>[km/h/Off]   |              | Status of high beam assist indicator lamp from high beam assist indicator lamp signal is received form BCM via CAN communication.  | F      |
| DIPPED BEAM IND<br>[Off]   | X            | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.   | G      |
| TIRE PRESS FR<br>[kPa, kg/cm2 or Psi]  |              | The data of front RH tire pressure form BCM via CAN communication.   |        |
| TIRE PRESS FL<br>[kPa, kg/cm2 or Psi]  |              | The data of front LH tire pressure form BCM via CAN communication.   | H      |
| TIRE PRESS RR<br>[kPa, kg/cm2 or Psi]  |              | The data of rear RH tire pressure form BCM via CAN communication.  | I      |
| TIRE PRESS RL<br>[kPa, kg/cm2 or Psi]  |              | The data of rear LH tire pressure form BCM via CAN communication.  |        |

## WARNING HISTORY

- Stores histories when warning/indicator lamp is turned on.
- “WARNING HISTORY” indicates the “TIME” when the warning/ indicator lamp is turned on.
- The “TIME” above is:
  - 0: The condition that the warning/indicator lamp has been turned on 1 or more times after starting the engine and waiting for 30 seconds.
  - 1 - 39: The number of times the engine was restarted after the 0 condition.
  - NO WARNING HISTORY: Stores NO (0) turning on history of warning/indicator lamp.

### NOTE:

- WARNING HISTORY is not stored for approximately 30 seconds after the engine starts.
- Brake warning lamp does not store any history when the parking brake is applied or the brake fluid level gets low.

## Display Item

| Display item  | Description   |
|---------------|---|
| ABS W/L       | Lighting history of ABS warning lamp.                 |
| VDC/TCS IND   | Lighting history of VDC OFF indicator lamp.           |
| SLIP IND      | Lighting history of VDC warning lamp.                 |
| BRAKE W/L     | Lighting history of brake warning lamp.               |
| ATC/T-AMT W/L | Lighting history of A/T check warning.                |
| DOOR W/L      | Lighting history of door open warning.                |
| OIL W/L       | Lighting history of engine oil pressure warning.      |
| C-ENG W/L     | Lighting history of malfunction indicator lamp (MIL). |
| BA W/L        | Lighting history of FEB warning lamp.                 |
| 4WD W/L       | Lighting history of AWD warning.                      |

WCS

## DIAGNOSIS SYSTEM (COMBINATION METER)

### < SYSTEM DESCRIPTION >

| Display item | Description   |
|--------------|---|
| FUEL W/L     | Lighting history of low fuel warning lamp.          |
| WASHER W/L   | Lighting history of low washer fluid warning lamp.  |
| AIR PRES W/L | Lighting history of low tire pressure warning lamp. |
| KEY G/Y W/L  | Lighting history of Intelligent Key system warning. |
| EPS W/L      | Lighting history of power steering warning lamp.    |
| AFS OFF IND  | Lighting history of AFS warning.                    |
| CHAGE W/L    | Lighting history of charge warning lamp.            |

**NOTE:**

In items displayed on the CONSULT screen, only those listed in the above table are used.

# DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (BCM)

### COMMON ITEM

### COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000011552026

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

| Diagnosis mode           | Function Description  |
|--------------------------|---|
| Work Support             | Changes the setting for each system function.   |
| Self Diagnostic Result   | Displays the diagnosis results judged by BCM.   |
| CAN Diag Support Monitor | Monitors the reception status of CAN communication viewed from BCM.   |
| Data Monitor             | The BCM input/output signals are displayed.   |
| Active Test              | The signals used to activate each device are forcibly supplied from BCM.  |
| Ecu Identification       | The BCM part number is displayed.   |
| Configuration            | <ul style="list-style-type: none"> <li>Read and save the vehicle specification.</li> <li>Write the vehicle specification when replacing BCM.</li> </ul> |

### SYSTEM APPLICATION

BCM can perform the following functions for each system.

#### NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

| System  | Sub system selection item | Diagnosis mode |              |             |
|---|---------------------------|----------------|--------------|-------------|
|   |                           | Work Support   | Data Monitor | Active Test |
| Door lock   | DOOR LOCK                 | ×              | ×            | ×           |
| Rear window defogger  | REAR DEFOGGER             | ×              | ×            | ×           |
| Warning chime   | BUZZER                    |                | ×            | ×           |
| Interior room lamp timer  | INT LAMP                  | ×              | ×            | ×           |
| Exterior lamp   | HEAD LAMP                 | ×              | ×            | ×           |
| Wiper and washer  | WIPER                     | ×              | ×            | ×           |
| Turn signal and hazard warning lamps  | FLASHER                   | ×              | ×            | ×           |
| —   | AIR CONDITONER*           |                | ×            | ×           |
| <ul style="list-style-type: none"> <li>Intelligent Key system</li> <li>Engine start system</li> </ul> | INTELLIGENT KEY           | ×              | ×            | ×           |
| Combination switch  | COMB SW                   |                | ×            |             |
| Body control system   | BCM                       | ×              |              |             |
| IVIS - NATS   | IMMU                      | ×              | ×            | ×           |
| Interior room lamp battery saver  | BATTERY SAVER             | ×              | ×            | ×           |
| Trunk lid open  | TRUNK                     |                | ×            |             |
| Vehicle security system   | THEFT ALM                 | ×              | ×            | ×           |
| RAP system  | RETAINED PWR              |                | ×            |             |
| Signal buffer system  | SIGNAL BUFFER             |                | ×            | ×           |
| TPMS  | AIR PRESSURE MONITOR      |                |              | ×           |

\*: This item is not used.

### FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

| CONSULT screen item | Indication/Unit  | Description  |  |
|---------------------|--|--|--|
| Vehicle Speed       | km/h   | Vehicle speed of the moment a particular DTC is detected   |  |
| Odo/Trip Meter      | km   | Total mileage (Odometer value) of the moment a particular DTC is detected  |  |
| Vehicle Condition   | SLEEP>LOCK   | Power position status of the moment a particular DTC is detected*  | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)             |
|                     | SLEEP>OFF  |  | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)              |
|                     | LOCK>ACC   |  | While turning power supply position from "LOCK" *to "ACC"  |
|                     | ACC>ON   |  | While turning power supply position from "ACC" to "IGN"  |
|                     | RUN>ACC  |  | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) |
|                     | CRANK>RUN  |  | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)                   |
|                     | RUN>URGENT   |  | While turning power supply position from "RUN" to "ACC" (Emergency stop operation)                                     |
|                     | ACC>OFF  |  | While turning power supply position from "ACC" to "OFF"  |
|                     | OFF>LOCK   |  | While turning power supply position from "OFF" to "LOCK"*  |
|                     | OFF>ACC  |  | While turning power supply position from "OFF" to "ACC"  |
|                     | ON>CRANK   |  | While turning power supply position from "IGN" to "CRANKING"   |
|                     | OFF>SLEEP  |  | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode              |
|                     | LOCK>SLEEP   |  | While turning BCM status from normal mode (Power supply position is "LOCK"*. ) to low power consumption mode           |
|                     | LOCK   |  | Power supply position is "LOCK" (Ignition switch OFF)*   |
|                     | OFF  |  | Power supply position is "OFF" (Ignition switch OFF)   |
|                     | ACC  |  | Power supply position is "ACC" (Ignition switch ACC)   |
|                     | ON   |  | Power supply position is "IGN" (Ignition switch ON with engine stopped)  |
|                     | ENGINE RUN   |  | Power supply position is "RUN" (Ignition switch ON with engine running)  |
| CRANKING            | Power supply position is "CRANKING" (At engine cranking) |  |  |
| IGN Counter         | 0 - 39   | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> <li>• The number is 0 when a malfunction is detected now.</li> <li>• The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON.</li> <li>• The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.</li> </ul> |  |

### NOTE:

\*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

## BUZZER

### BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:0000000011281472

### CONSULT APPLICATION ITEMS

# DIAGNOSIS SYSTEM (BCM)

## < SYSTEM DESCRIPTION >

| Test item | Diagnosis mode         | Description   |
|-----------|------------------------|---|
| BUZZER    | Self Diagnostic Result | Displays the diagnosis results judged by BCM.                                   |
|           | Data Monitor           | Displays BCM input data in real time.   |
|           | Active Test            | Operation of electrical loads can be checked by sending driving signal to them. |
|           | Ecu Identification     | The BCM part number is displayed.   |

### SELF DIAG RESULT

Refer to [BCS-62. "DTC Index"](#).

### DATA MONITOR

#### NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

| Display item<br>[Unit]   | Description  |
|--------------------------|--|
| PUSH SW<br>[On/Off]      | Status of push-button ignition switch judged by BCM.   |
| UNLK SEN-DR<br>[On/Off]  | Status of unlock sensor judged by BCM.   |
| VEH SPEED 1<br>[km/h]    | Value of vehicle speed signal received from combination meter with CAN communication line.   |
| TAIL LAMP SW<br>[On/Off] | Status of lighting switch judged by BCM using the combination switch readout function.       |
| FR FOG SW<br>[On/Off]    | Status of front fog lamp switch judged by BCM using the combination switch readout function. |
| DOOR SW-DR<br>[On/Off]   | Status of driver side door switch judged by BCM.   |
| CDL LOCK SW<br>[On/Off]  | Status of door lock unlock switch judged by BCM.   |

### ACTIVE TEST

| Display item<br>[Unit] | Description   |
|------------------------|---|
| SEAT BELT WARN TEST    | The seat belt warning chime operation can be checked by operating the relevant function (On/Off). |
| LIGHT WARN ALM         | The light warning chime operation can be checked by operating the relevant function (On/Off).     |
| REVERSE WARNING        | This item is displayed, but cannot be monitored.  |

#### NOTE:

Some items are not available according to vehicle specification.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

## ECU DIAGNOSIS INFORMATION

### COMBINATION METER

#### Reference Value

INFOID:000000011281473

#### VALUES ON THE DIAGNOSIS TOOL

**NOTE:**

The following table includes information (items) inapplicable to this vehicle. for information (items) applicable to this vehicle, refer to consult display items.

| Monitor Item                  | Condition          |  | Value/Status  |
|-------------------------------|--------------------|--|---|
| SPEED METER<br>[mph or km/h]  | Ignition switch ON | While driving  | Input value of vehicle speed signal (CAN communication signal)              |
| SPEED OUTPUT<br>[mph or km/h] | Ignition switch ON | While driving  | Output value of vehicle speed signal (CAN communication signal)             |
| ODO OUTPUT<br>[mph or km/h]   | Ignition switch ON | —  | Output value of odometer signal (CAN communication signal)                  |
| TACHO METER<br>[rpm]          | Ignition switch ON | Engine running   | Input value of engine speed signal (CAN communication signal)               |
| FUEL METER<br>[L]             | Ignition switch ON | —  | Input value of fuel level sensor signal                                     |
| W TEMP METER<br>[°F] or [°C]  | Ignition switch ON | —  | Input value of engine coolant temperature signal (CAN communication signal) |
| ABS W/L                       | Ignition switch ON | ABS warning lamp ON  | On  |
|                               |                    | ABS warning lamp OFF   | Off   |
| VDC/TCS IND                   | Ignition switch ON | VDC OFF indicator lamp ON  | On  |
|                               |                    | VDC OFF indicator lamp OFF                                       | Off   |
| SLIP IND                      | Ignition switch ON | VDC warning lamp ON  | On  |
|                               |                    | VDC warning lamp OFF   | Off   |
| BRAKE W/L                     | Ignition switch ON | Brake warning lamp ON  | On <sup>*1</sup>  |
|                               |                    | Brake warning lamp OFF   | Off   |
| DOOR W/L                      | Ignition switch ON | During door open warning indication                              | On  |
|                               |                    | Other than the above   | Off   |
| TRUNK/GLAS-H                  | Ignition switch ON | During trunk open warning indication                             | On  |
|                               |                    | Other than the above   | Off   |
| HI-BEAM IND                   | Ignition switch ON | High beam indicator lamp ON                                      | On  |
|                               |                    | High beam indicator lamp OFF                                     | Off   |
| TURN IND                      | Ignition switch ON | Turn signal indicator lamp ON                                    | On  |
|                               |                    | Turn signal indicator lamp OFF                                   | Off   |
| FR FOG IND                    | Ignition switch ON | Front fog lamp indicator lamp ON                                 | On  |
|                               |                    | Front fog lamp indicator lamp OFF                                | Off   |
| RR FOG IND                    | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off   |
| LIGHT IND                     | Ignition switch ON | Position lamp indicator lamp ON                                  | On  |
|                               |                    | Position lamp indicator lamp OFF                                 | Off   |
| OIL W/L                       | Ignition switch ON | During engine oil pressure warning indication                    | On  |
|                               |                    | Other than the above   | Off   |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item   | Condition          |  | Value/Status                    |     |
|----------------|--------------------|--|---------------------------------|-----|
| MIL            | Ignition switch ON | Malfunction indicator lamp ON                                    | On                              | A   |
|                |                    | Malfunction indicator lamp OFF                                   | Off                             |     |
| BA W/L         | Ignition switch ON | FEB warning lamp ON  | On                              | B   |
|                |                    | FEB warning lamp OFF   | Off                             |     |
| ATC/T-AMT W/L  | Ignition switch ON | A/T CHECK warning indication                                     | On                              | C   |
|                |                    | Other than the above   | Off                             |     |
| GEAR SHIFT IND | Ignition switch ON | Gear shift indicator UP indication                               | Up                              | D   |
|                |                    | Gear shift indicator DOWN indication                             | Down                            |     |
|                |                    | Other than the above   | Up/Dwn                          |     |
| 4WD W/L        | Ignition switch ON | During AWD warning indication                                    | On                              | E   |
|                |                    | Other than the above   | Off                             |     |
| FUEL W/L       | Ignition switch ON | Low fuel warning lamp ON   | On                              | F   |
|                |                    | Low fuel warning lamp OFF  | Off                             |     |
| WASHER W/L     | Ignition switch ON | During low washer fluid warning indication                       | On                              | G   |
|                |                    | Other than the above   | Off                             |     |
| AIR PRES W/L   | Ignition switch ON | Low tire pressure warning lamp ON                                | On                              | H   |
|                |                    | Low tire pressure warning lamp OFF                               | Off                             |     |
| KEY G/Y W/L    | Ignition switch ON | Intelligent Key system warning indication                        | On                              | I   |
|                |                    | Other than the above   | Off                             |     |
| EPS W/L        | Ignition switch ON | Power steering warning lamp ON                                   | On                              | J   |
|                |                    | Power steering warning lamp OFF                                  | Off                             |     |
| AFS OFF IND    | Ignition switch ON | During AFS warning indication                                    | On                              | K   |
|                |                    | Other than the above   | Off                             |     |
| READY IND      | Power switch ON    | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off                             | L   |
| SYS FAIL W/L   | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off                             | M   |
| SFT POSI W/L   | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off                             |     |
| HEV BRAKE W/L  | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off                             |     |
| CHAGE W/L      | Ignition switch ON | Charge warning lamp ON   | On                              | WCS |
|                |                    | Charge warning lamp OFF  | Off                             |     |
| ACC TARGET     | Ignition switch ON | During vehicle ahead detection indicator indication              | On                              | O   |
|                |                    | Other than the above   | Off                             |     |
| ACC DISTANCE   | Ignition switch ON | When following distance set to "LONG"                            | LONG                            | P   |
|                |                    | When following distance set to "MIDDLE"                          | MID                             |     |
|                |                    | When following distance set to "SHORT"                           | SHORT                           |     |
|                |                    | Set distance indicator not displayed                             | Off                             |     |
| ACC SET SPEED  | Ignition switch ON | During set vehicle speed indicator not displayed                 | Off                             |     |
|                |                    | During set vehicle speed indicator displayed                     | Indicates the set vehicle speed |     |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item    | Condition          |   | Value/Status |
|-----------------|--------------------|---|--------------|
| ACC UNIT        | Ignition switch ON | Set vehicle speed indicator unit display ON               | On           |
|                 |                    | Set vehicle speed indicator unit display OFF              | Off          |
| SHIFT IND       | Ignition switch ON | During the indication of "P" by shift position indicator  | P            |
|                 |                    | During the indication of "R" by shift position indicator  | R            |
|                 |                    | During the indication of "N" by shift position indicator  | N            |
|                 |                    | During the indication of "D" by shift position indicator  | D            |
|                 |                    | During the indication of "M1" by shift position indicator | M1           |
|                 |                    | During the indication of "M2" by shift position indicator | M2           |
|                 |                    | During the indication of "M3" by shift position indicator | M3           |
|                 |                    | During the indication of "M4" by shift position indicator | M4           |
|                 |                    | During the indication of "M5" by shift position indicator | M5           |
|                 |                    | During the indication of "M6" by shift position indicator | M6           |
|                 |                    | During the indication of "M7" by shift position indicator | M7           |
| ECO DRIVE IND G | Ignition switch ON | ECO drive indicator (green) ON                            | On           |
|                 |                    | ECO drive indicator (green) OFF                           | Off          |
| FUEL CAP W/L    | Ignition switch ON | During fuel filler cap warning indication                 | On           |
|                 |                    | Other than the above                                      | Off          |
| M RANGE SW      | Ignition switch ON | Shift selector in manual mode position                    | On           |
|                 |                    | Other than the above                                      | Off          |
| NM RANGE SW     | Ignition switch ON | Shift selector in manual mode position                    | Off          |
|                 |                    | Other than the above                                      | On           |
| AT SFT UP SW    | Ignition switch ON | Shift selector operated in the up position                | On           |
|                 |                    | Other than the above                                      | Off          |
| AT SFT DWN SW   | Ignition switch ON | Shift selector operated in the down position              | On           |
|                 |                    | Other than the above                                      | Off          |
| ST SFT UP SW    | Ignition switch ON | Paddle shifter operated in up position                    | On           |
|                 |                    | Shift selector is in non manual mode up position          | Off          |
| ST SFT DWN SW   | Ignition switch ON | Paddle shifter operated in down position                  | On           |
|                 |                    | Other than the above                                      | Off          |
| PKB SW          | Ignition switch ON | Parking brake switch ON                                   | On           |
|                 |                    | Parking brake switch OFF                                  | Off          |
| BUCKLE SW       | Ignition switch ON | Driver seat belt not fastened                             | On           |
|                 |                    | Driver seat belt fastened                                 | Off          |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item                  | Condition          |  | Value/Status  |     |
|-------------------------------|--------------------|--|---|-----|
| BRAKE OIL SW                  | Ignition switch ON | Brake fluid level switch ON                                      | On  | A   |
|                               |                    | Brake fluid level switch OFF                                     | Off   |     |
| LED LMP R OPEN                | Power switch ON    | Front combination lamp RH malfunction                            | On  | B   |
|                               |                    | Front combination lamp RH normal                                 | Off   |     |
| LED LMP L OPEN                | Power switch ON    | Front combination lamp LH malfunction                            | On  | C   |
|                               |                    | Front combination lamp LH normal                                 | Off   |     |
| DISTANCE<br>[mile] or [km]    | Ignition switch ON | —  | Distance to empty   | D   |
| OUTSIDE TEMP<br>[°F] or [°C]  | Ignition switch ON | —  | Displays the ambient air temperature which is input from the ambient sensor | D   |
| FUEL LOW SIG                  | —                  | During low fuel level indication                                 | On  | E   |
|                               |                    | Except during low fuel level indication                          | Off   |     |
| CRANKING SIG                  | Ignition switch ON |  | On  | F   |
|                               | At engine cranking |  | Off   |     |
| ST CNT SIG                    | Ignition switch ON |  | On  | G   |
|                               | At engine cranking |  | Off   |     |
| BUZZER                        | Ignition switch ON | Buzzer ON  | On  | H   |
|                               |                    | Buzzer OFF   | Off   |     |
| BAT CIR STA                   | Ignition switch ON | Battery power supply circuit is normal                           | Normal  | H   |
|                               |                    | Battery power supply circuit is open                             | Open  |     |
| TPMS FLT TIRE                 | Ignition switch ON | Flat tire  | On  | I   |
|                               |                    | Other than above   | Off   |     |
| TPMS PRESS L                  | Ignition switch ON | Tire pressure is low   | On  | J   |
|                               |                    | Tire pressure is normal  | Off   |     |
| ASCD SPD BLNK                 | Ignition switch ON | Set vehicle speed indicator blinking                             | On  | K   |
|                               |                    | Set vehicle speed indicator not blinking                         | Off   |     |
| ASCD STATUS                   | Ignition switch ON | ASCD and speed limiter system OFF                                | Off   | L   |
|                               |                    | ASCD system ON   | ASCD  |     |
|                               |                    | ASCD set vehicle speed   | CRUISE  |     |
| ASCD REQ SPD<br>[km/h or Off] | Ignition switch ON | While driving  | Same value as ASCD set vehicle speed  | M   |
| HILL HOLD WARNING             | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off   | M   |
| ASSIST/CHARGE GAUGE           | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | 0 %   | WCS |
| EV IND                        | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | Off   | O   |
| ECO DRIVE NAVI                | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored. | LEVEL0  | P   |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item                        | Condition            |  | Value/Status           |
|-------------------------------------|----------------------|--|------------------------|
| LCD                                 | Ignition switch ON   | During engine start information indication   | B&P I                  |
|                                     | Ignition switch ACC  | During engine start information indication   | B&P N                  |
|                                     | Ignition switch LOCK | During key ID warning indication   | ID NG                  |
|                                     | Ignition switch LOCK | During steering lock information indication  | ROTAT                  |
|                                     | Ignition switch LOCK | During P position warning indication   | SFT P                  |
|                                     | Ignition switch LOCK | During Intelligent Key insert information indication   | INSRT                  |
|                                     | Ignition switch LOCK | During Intelligent Key low battery warning indication  | BATT                   |
|                                     | Ignition switch ON   | During take away warning indication  | NO KY                  |
|                                     | Ignition switch LOCK | During key warning indication  | OUTKY                  |
|                                     | Ignition switch ON   | During ACC warning indication  | LK WN                  |
|                                     | Ignition switch ON   | During ignition battery saver system information (after operation) indication                | IGN AUTO OFF           |
|                                     | Ignition switch ON   | During ignition battery saver system information (three minutes before operation) indication | 3 min before IGN OFF   |
|                                     | Ignition switch ON   | Other than above   | OFF                    |
|                                     | STRG SW INPUT        | Ignition switch ON   | BACK switch is pressed |
| MENU UP switch is pressed           |                      |  | SW2                    |
| MENU DOWN switch is pressed         |                      |  | SW3                    |
| Voice recognition switch is pressed |                      |  | SW4                    |
| MENU OK switch is pressed           |                      |  | SW5                    |
| VOL DOWN switch is pressed          |                      |  | SW6                    |
| VOL UP switch is pressed            |                      |  | SW7                    |
| TEL switch is pressed               |                      |  | SW8                    |
| Display back switch is pressed      |                      |  | SW9                    |
| Display next switch is pressed      |                      |  | SW10                   |
| Other than above                    |                      |  | NO INPUT               |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item                          | Condition          | Value/Status  |             |     |
|---------------------------------------|--------------------|---|-------------|-----|
| ITS SONER SET OUTPUT                  | Ignition switch ON | FCW indicator indication  | FCW ON      | A   |
|                                       |                    | FCW indicator is not indication   | FCW OFF     |     |
|                                       |                    | LDW indicator indication  | LDW ON      | B   |
|                                       |                    | LDW indicator is not indication   | LDW OFF     |     |
|                                       |                    | Blind Spot Intervention indicator indication                                      | BSW ON      |     |
|                                       |                    | Blind Spot Intervention indicator is not indication                               | BSW OFF     | C   |
|                                       |                    | DCA indicator indication  | DCA ON      |     |
|                                       |                    | DCA indicator is not indication   | DCA OFF     | D   |
|                                       |                    | LDP indicator indication  | LDP ON      |     |
|                                       |                    | LDP indicator is not indication   | LDP OFF     | E   |
|                                       |                    | Blind Spot Warning/Blind Spot Intervention warning indication                     | BSI ON      |     |
|                                       |                    | Blind Spot Warning/Blind Spot Intervention warning brightness control is bright   | BSI BRIGHT  | F   |
|                                       |                    | Blind Spot Warning/Blind Spot Intervention warning brightness control is standard | BSI STD     |     |
|                                       |                    | Blind Spot Warning/Blind Spot Intervention warning brightness control is dark     | BSI DARK    | G   |
|                                       |                    | LDP timing control status is early  | LDP T EARLY |     |
|                                       |                    | LDP timing control status is middle   | LDP T MID   | H   |
|                                       |                    | LDP timing control status is late   | LDP T LATE  |     |
|                                       |                    | DCA pedal sensitivity control status is high                                      | DCA HIGH    | I   |
|                                       |                    | DCA pedal sensitivity control status is middle                                    | DCA MID     |     |
|                                       |                    | DCA pedal sensitivity control status is low                                       | DCA LOW     | J   |
|                                       |                    | BCI ignition on status is ON  | BCI IGN ON  |     |
|                                       |                    | BCI ignition on status is OFF   | BCI IGN OFF | K   |
|                                       |                    | FEB control status is ON  | IBA ON      |     |
| FEB control status is OFF             | IBA OFF            |   |             |     |
| BCI auto resume control status is ON  | BCI AUTO ON        | L   |             |     |
| BCI auto resume control status is OFF | BCI AUTO OFF       |   |             |     |
| Other than above                      | NO SW ST           | M   |             |     |
| CHASSIS CONTROL WARN                  | Ignition switch ON | Chassis control warning indication  | On          |     |
|                                       |                    | Other than above  | Off         |     |
| LOW LI-ION BAT CHG WARN               | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.                  | Off         | WCS |
| VSP OFF IND                           | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.                  | Off         | O   |
| HI-BEAM ASST IND                      | Ignition switch ON | High beam assist indicator lamp ON  | On          |     |
|                                       |                    | High beam assist indicator lamp OFF   | Off         | P   |
| DIPPED BEAM IND                       | Ignition switch ON | <b>NOTE:</b><br>This item is displayed, but cannot be monitored.                  | Off         |     |
| TIRE PRESS FR                         | Ignition switch ON | —   | 0 - 63.75   |     |
| TIRE PRESS FL                         | Ignition switch ON | —   | 0 - 63.75   |     |

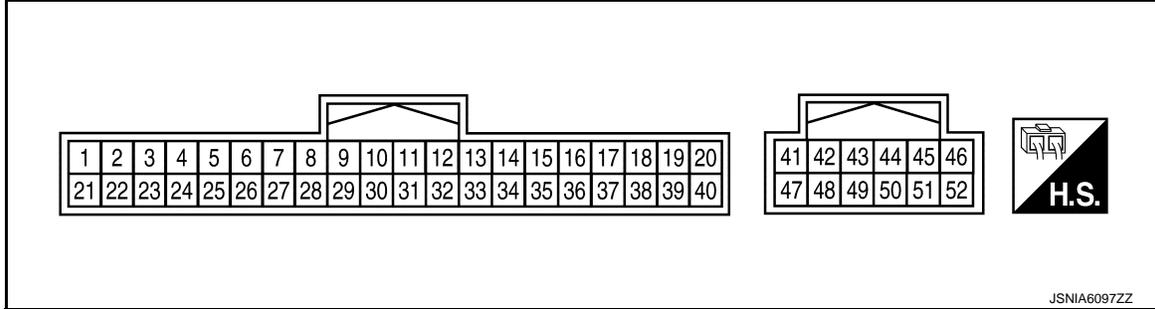
# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item  | Condition          |   | Value/Status |
|---------------|--------------------|---|--------------|
| TIRE PRESS RR | Ignition switch ON | — | 0 - 63.75    |
| TIRE PRESS RL | Ignition switch ON | — | 0 - 63.75    |

\*1: Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.

## TERMINAL LAYOUT



## PHYSICAL VALUES

| Terminal No.<br>(Wire color) |        | Description                         |                  | Condition                          |                              | Value<br>(Approx.) |
|------------------------------|--------|-------------------------------------|------------------|------------------------------------|------------------------------|--------------------|
| +                            | -      | Signal name                         | Input/<br>Output |                                    |                              |                    |
| 1<br>(B)                     | Ground | Ground                              | —                | —                                  | —                            | 0 V                |
| 7<br>(G)                     | Ground | Security signal                     | Input            | Ignition<br>switch<br>OFF          | Security indicator ON        | 0 V                |
|                              |        |                                     |                  |                                    | Security indicator OFF       | 12 V               |
| 8*<br>(B)                    | —      | —                                   | —                | —                                  | —                            | 0 V                |
| 11<br>(W)                    | Ground | Alternator signal                   | —                | Ignition<br>switch<br>ON           | Charge warning lamp ON       | 2 V                |
|                              |        |                                     |                  |                                    | Charge warning lamp OFF      | 12 V               |
| 12<br>(G)                    | Ground | LED headlamp (RH)<br>warning signal | Input            | Ignition<br>switch<br>ON           | Headlamp ON                  | 1.0 V              |
|                              |        |                                     |                  |                                    | Headlamp OFF                 | 12 V               |
| 13<br>(BR)                   | Ground | LED headlamp (LH)<br>warning signal | Input            | Ignition<br>switch<br>ON           | Headlamp ON                  | 1.0 V              |
|                              |        |                                     |                  |                                    | Headlamp OFF                 | 12 V               |
| 14<br>(V)                    | Ground | ACC power supply                    | —                | Ignition<br>switch<br>ACC          | —                            | Battery voltage    |
| 16<br>(V)                    | Ground | Air bag signal                      | Input            | Ignition<br>switch<br>ON           | Air bag warning lamp ON      | —                  |
|                              |        |                                     |                  |                                    | Air bag warning lamp OFF     | —                  |
| 17<br>(BR)                   | Ground | Meter control switch<br>ground      | —                | —                                  | —                            | 0 V                |
| 18<br>(SB)                   | Ground | Trip/reset signal                   | Input            | Ignition<br>switch<br>OFF or<br>ON | Trip/Reset switch is pressed | 0 V                |
|                              |        |                                     |                  |                                    | Other than the above         | 5.0 V              |
| 21<br>(B)                    | Ground | Steering switch signal<br>ground    | —                | —                                  | —                            | 0 V                |

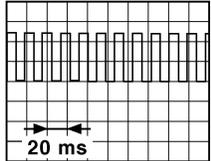
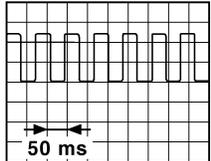
# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(Wire color) |        | Description                                     |                  | Condition                          | Value<br>(Approx.)   |       |     |
|------------------------------|--------|---|------------------|------------------------------------|--|-------|-----|
| +                            | -      | Signal name                                     | Input/<br>Output |                                    |  |       |     |
| 22<br>(P)                    | Ground | Steering switch signal A                        | Input            | Ignition<br>switch<br>OFF or<br>ON | Keep pressing BACK switch  | 0 V   | A   |
|                              |        |   |                  |                                    | Keep pressing MENU UP switch   | 0.5 V | B   |
|                              |        |   |                  |                                    | Keep pressing MENU DOWN<br>switch  | 1.2 V | C   |
|                              |        |   |                  |                                    | Keep pressing Voice Recognition<br>switch  | 2.1 V | D   |
|                              |        |   |                  |                                    | Keep pressing MENU OK switch   | 3.3 V |     |
| 23<br>(W/<br>B)              | Ground | Steering switch signal B                        | Input            | Ignition<br>switch<br>OFF or<br>ON | Keep pressing VOLUME UP<br>switch  | 0.5 V | E   |
|                              |        |   |                  |                                    | Keep pressing VOLUME DOWN<br>switch  | 0 V   | F   |
|                              |        |   |                  |                                    | Keep pressing TEL switch   | 1.2 V | G   |
|                              |        |   |                  |                                    | Keep pressing display next<br>switch (▶)   | 3.3 V |     |
|                              |        |   |                  |                                    | Keep pressing display back<br>switch (◀)   | 2.1 V |     |
| 24<br>(L)                    | Ground | Washer level switch sig-<br>nal                 | Input            | Ignition<br>switch<br>ON           | Washer level switch ON   | 0 V   | H   |
|                              |        |   |                  |                                    | Washer level switch OFF  | 12 V  |     |
| 25<br>(LG)                   | Ground | Brake fluid level switch<br>signal              | Input            | Ignition<br>switch<br>ON           | Brake fluid level low  | 0 V   | I   |
|                              |        |   |                  |                                    | Brake fluid level normal   | 12 V  |     |
| 26<br>(V)                    | Ground | Parking brake switch<br>signal                  | Input            | Ignition<br>switch<br>ON           | Parking brake applied  | 0 V   | J   |
|                              |        |   |                  |                                    | Parking brake released   | 12 V  |     |
| 27<br>(G)                    | Ground | Passenger seat belt<br>warning signal           | Input            | Ignition<br>switch<br>ON           | <ul style="list-style-type: none"> <li>• When getting in the passenger seat.</li> <li>• When passenger seat belt is fastened.</li> </ul>   | —     | K   |
|                              |        |   |                  |                                    | <ul style="list-style-type: none"> <li>• When getting in the passenger seat.</li> <li>• When passenger seat belt is unfastened.</li> </ul> | —     | L   |
| 28<br>(W)                    | Ground | Seat belt buckle switch<br>signal (driver side) | Input            | Ignition<br>switch<br>ON           | When driver seat belt is fastened.   | 12 V  | M   |
|                              |        |   |                  |                                    | When driver seat belt is unfastened.   | 0 V   |     |
| 30<br>(SB)                   | Ground | Manual mode signal                              | Input            | Ignition<br>switch<br>ON           | Selector lever manual mode posi-<br>tion   | 0 V   | WCS |
|                              |        |   |                  |                                    | Other than the above   | 12 V  |     |
| 31<br>(G)                    | Ground | Non-manual mode sig-<br>nal                     | Input            | Ignition<br>switch<br>ON           | Selector lever manual mode posi-<br>tion   | 12 V  | O   |
|                              |        |   |                  |                                    | Other than the above   | 0 V   |     |
| 32<br>(BG)                   | Ground | Manual mode shift up<br>signal                  | Input            | Ignition<br>switch<br>ON           | Selector lever UP operation  | 0 V   | P   |
|                              |        |   |                  |                                    | Other than the above   | 12 V  |     |
| 33<br>(GR)                   | Ground | Manual mode shift down<br>signal                | Input            | Ignition<br>switch<br>ON           | Selector lever DOWN operation  | 0 V   |     |
|                              |        |   |                  |                                    | Other than the above   | 12 V  |     |

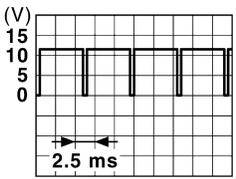
# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(Wire color) |        | Description                               |                  | Condition                          |   | Value<br>(Approx.)  |
|------------------------------|--------|---|------------------|------------------------------------|---|---|
| +                            | -      | Signal name                               | Input/<br>Output |                                    |   |   |
| 34<br>(BG)                   | Ground | Paddle shifter up switch<br>signal        | Input            | Ignition<br>switch<br>ON           | Paddle shift up operated  | 0 V   |
|                              |        |   |                  |                                    | Other than the above  | 12 V  |
| 35<br>(G)                    | Ground | Paddle shifter down<br>switch signal      | Input            | Ignition<br>switch<br>ON           | Paddle shift down operated  | 0 V   |
|                              |        |   |                  |                                    | Other than the above  | 12 V  |
| 36<br>(V)                    | Ground | Illumination control<br>switch signal (+) | Input            | Ignition<br>switch<br>OFF or<br>ON | When illumination control switch<br>(+) is pressed                          | 0 V   |
|                              |        |   |                  |                                    | Other than the above  | 5.0 V   |
| 37<br>(GR)                   | Ground | Illumination control<br>switch signal (-) | Input            | Ignition<br>switch<br>OFF or<br>ON | When illumination control switch<br>(-) is pressed                          | 0 V   |
|                              |        |   |                  |                                    | Other than the above  | 5.0 V   |
| 38<br>(R)                    | Ground | Vehicle speed signal<br>(8-pulse)         | Output           | Ignition<br>switch<br>ON           | Speedometer operated [When<br>vehicle speed is approx. 25 MPH<br>(40 km/h)] | <p><b>NOTE:</b><br/>The maximum voltage varies de-<br/>pending on the specification<br/>(destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0012GB</p>  |
| 39<br>(L)                    | Ground | Vehicle speed signal<br>(2-pulse)         | Output           | Ignition<br>switch<br>ON           | Speedometer operated<br>[When vehicle speed is approx.<br>25 MPH (40 km/h)] | <p><b>NOTE:</b><br/>The maximum voltage varies de-<br/>pending on the specification<br/>(destination unit).</p>  <p style="text-align: right; font-size: small;">JSNIA0015GB</p> |
| 41<br>(L)                    | Ground | CAN-H                                     | —                | —                                  | —   | —   |
| 42<br>(P)                    | Ground | CAN-L                                     | —                | —                                  | —   | —   |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(Wire color) |        | Description                 |                  | Condition                   | Value<br>(Approx.)   |                 |                 |
|------------------------------|--------|-----------------------------|------------------|-----------------------------|--|-----------------|-----------------|
| +                            | -      | Signal name                 | Input/<br>Output |                             |  |                 |                 |
| 43<br>(B)                    | Ground | Illumination control signal | Output           | Ignition switch ON          | <ul style="list-style-type: none"> <li>Lighting switch 1ST position</li> <li>When meter illumination is minimum</li> </ul>  <p style="text-align: right; font-size: small;">JSNIA5983GB</p> |                 |                 |
|                              |        |                             |                  |                             | <ul style="list-style-type: none"> <li>Lighting switch 1ST position</li> <li>When meter illumination is step 11</li> </ul>  <p style="text-align: right; font-size: small;">JPNIA1686GB</p> |                 |                 |
|                              |        |                             |                  |                             | <ul style="list-style-type: none"> <li>Lighting switch 1ST position</li> <li>When meter illumination is maximum</li> </ul> <p style="text-align: center;">0 V</p>  |                 |                 |
| 44<br>(Y)                    | Ground | Fuel level sensor ground    | —                | Ignition switch ON          | —  | 0 V             |                 |
| 45<br>(W)                    | Ground | Battery power supply        | —                | —                           | —  | Battery voltage |                 |
| 46<br>(R)                    | Ground | Ignition signal             | —                | Ignition switch ON or START | —  | 12 V            |                 |
| 47<br>(LG)                   | Ground | AV communication signal (H) | —                | —                           | —  | —               |                 |
| 48<br>(SB)                   | Ground | AV communication signal (L) | —                | —                           | —  | —               |                 |
| 51<br>(BR)                   | Ground | Fuel level sensor signal    | —                | Ignition switch ON          | Fuel gauge indication position   | Full            | Less than 98 Ω  |
|                              |        |                             |                  |                             |  | 1/2             | 186 Ω           |
|                              |        |                             |                  |                             |  | 1/4             | 232 Ω           |
|                              |        |                             |                  |                             |  | 1/8             | 255 Ω           |
|                              |        |                             |                  |                             |  | Empty           | More than 275 Ω |
| 52<br>(B)                    | Ground | Ground                      | —                | —                           | —  | 0 V             |                 |

\*: This harness is not used.

### Fail-Safe

INFOID:0000000011281474

### FAIL-SAFE

The combination meter activates the fail-safe control if CAN communication with each unit is malfunctioning.

| Function    | Specifications                             |
|-------------|--|
| Speedometer | Reset to zero by suspending communication. |
| Tachometer  |  |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| Function                         |                                  | Specifications   |  |
|----------------------------------|----------------------------------|--|--|
| Engine coolant temperature gauge |                                  | <ul style="list-style-type: none"> <li>When reception time of an abnormal signal is 60 seconds or less, the last value received.</li> <li>When reception time of an abnormal signal is more than 60 seconds, reset to zero.</li> </ul> |  |
| Illumination control             |                                  | When suspending communication, changes to nighttime mode.  |  |
| Information display              | Odo/trip meter                   | An indicated value is maintained at communications blackout.   |  |
|                                  | Shift position indicator         | The display turns OFF by suspending communication.   |  |
|                                  | Clock                            | When suspending communication, internal clock time is indicated.   |  |
|                                  | Chassis control display          | The display turns no effect by suspending communication.   |  |
|                                  | Trip computer                    | Current fuel consumption   | The last result calculated during normal condition is indicated. |
|                                  |                                  | Average fuel consumption   |  |
|                                  |                                  | Average vehicle speed  |  |
|                                  |                                  | Travel time  |  |
|                                  |                                  | Travel distance  |  |
|                                  |                                  | Distance to empty  |  |
|                                  | Warning/indicator                | AFS warning  | The display turns ON by suspending communication.                |
|                                  |                                  | AWD warning  |  |
|                                  |                                  | Chassis control warning  |  |
|                                  |                                  | Other than the above   |  |
| Buzzer                           |                                  | The buzzer turns OFF by suspending communication.  |  |
| Warning lamp/indicator lamp      | ABS warning lamp                 | The lamp turns ON by suspending communication.   |  |
|                                  | VDC warning lamp                 |  |  |
|                                  | Brake warning lamp               |  |  |
|                                  | FEB warning lamp                 |  |  |
|                                  | Power steering warning lamp      |  |  |
|                                  | Malfunction indicator lamp (MIL) |  |  |
|                                  | Low tire pressure warning lamp   | <ul style="list-style-type: none"> <li>When reception time of an abnormal signal is 60 seconds or less, the lamp blinking.</li> <li>When reception time of an abnormal signal is more than 60 seconds, the lamp turns ON.</li> </ul>   |  |
|                                  | High beam indicator lamp         | The lamp turns OFF by suspending communication.  |  |
|                                  | Turn signal indicator lamp       |  |  |
|                                  | VDC OFF indicator lamp           |  |  |
|                                  | Front fog lamp indicator lamp    |  |  |
|                                  | Position lamp indicator lamp     |  |  |
|                                  | High beam assist indicator lamp  |  |  |
|                                  | Charge warning lamp              |  |  |
| ECO drive indicator lamp         |                                  |  |  |

## DTC Index

INFOID:000000011281475

| DTC   | CONSULT display    | Reference                                  |
|-------|--------------------|--|
| U1000 | CAN COMM CIRCUIT   | <a href="#">MWI-99, "DTC Description"</a>  |
| U1010 | CONTROL UNIT (CAN) | <a href="#">MWI-100, "DTC Description"</a> |

# COMBINATION METER

## < ECU DIAGNOSIS INFORMATION >

| DTC   | CONSULT display | Reference                                  |
|-------|-----------------|--|
| B2205 | VEHICLE SPEED   | <a href="#">MWI-101, "DTC Description"</a> |
| B2267 | ENGINE SPEED    | <a href="#">MWI-102, "DTC Description"</a> |
| B2268 | WATER TEMP      | <a href="#">MWI-103, "DTC Description"</a> |

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

# BCM

< ECU DIAGNOSIS INFORMATION >

## BCM

### List of ECU Reference

INFOID:0000000011281476

| ECU | Reference   |
|-----|---|
| BCM | <a href="#">BCS-35, "Reference Value"</a>               |
|     | <a href="#">BCS-60, "Fail-safe"</a>                     |
|     | <a href="#">BCS-61, "DTC Inspection Priority Chart"</a> |
|     | <a href="#">BCS-62, "DTC Index"</a>                     |

# WARNING CHIME SYSTEM

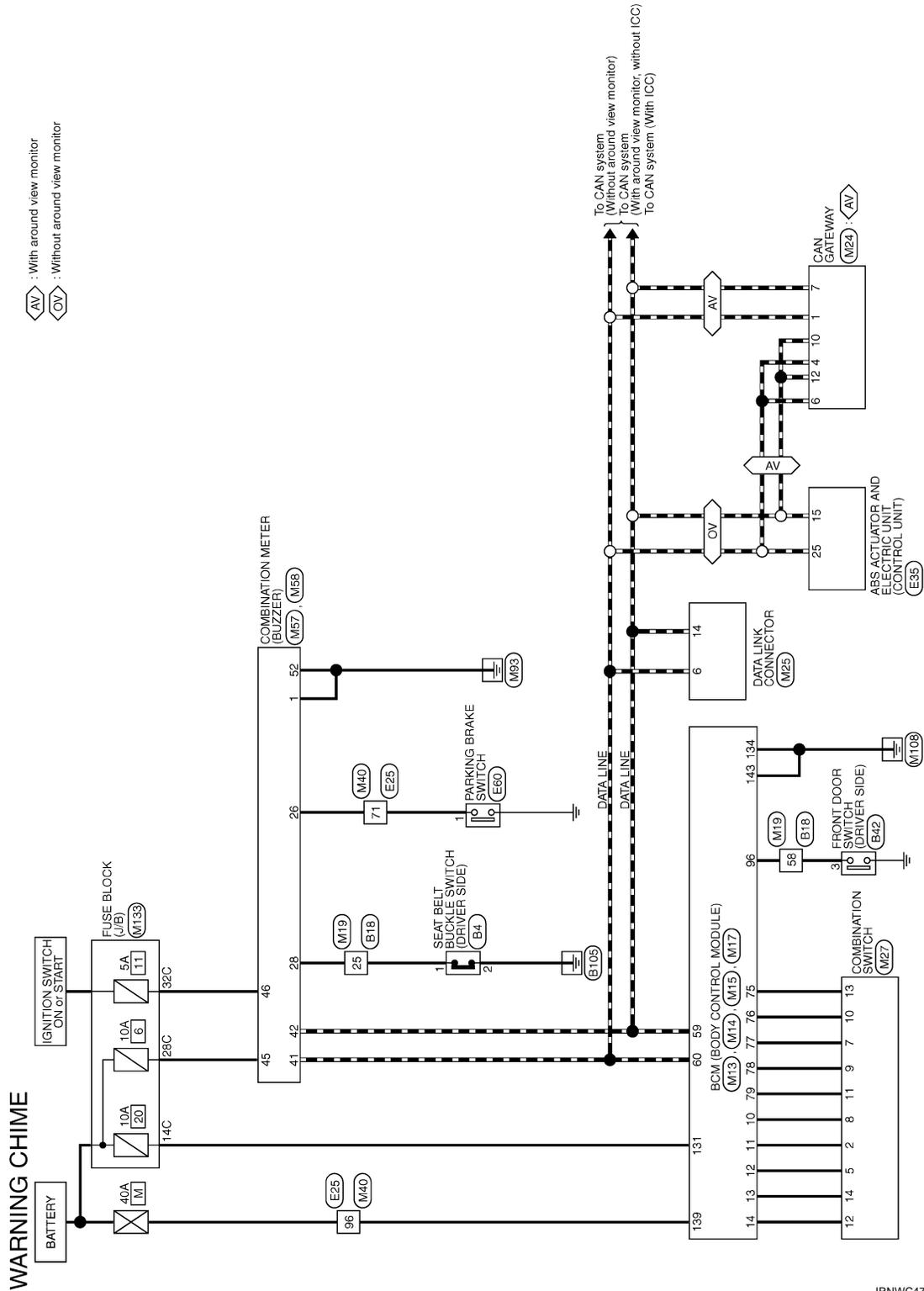
< WIRING DIAGRAM >

## WIRING DIAGRAM

### WARNING CHIME SYSTEM

#### Wiring Diagram

INFOID:000000011281477



2013/05/17

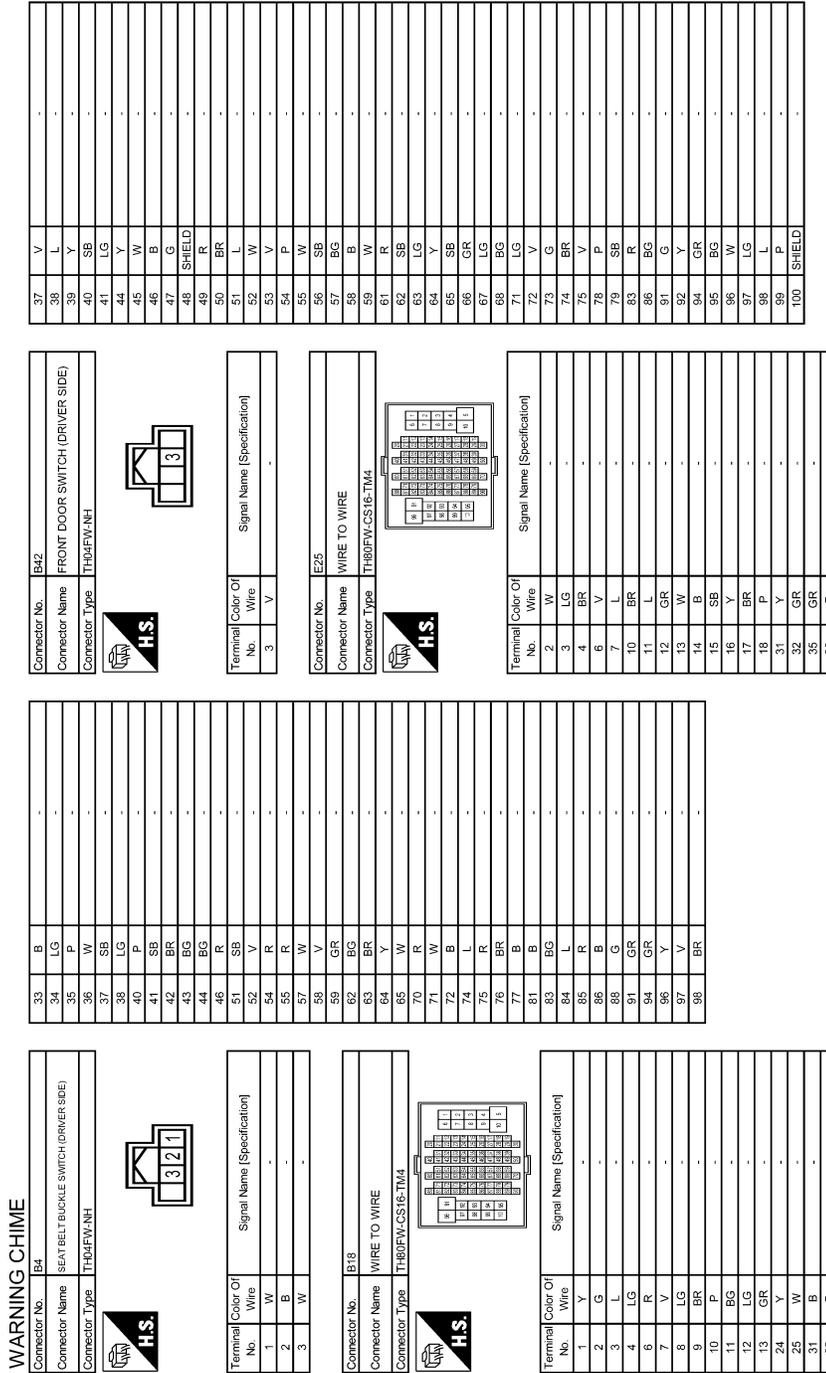
JRNWC4722GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

WCS

# WARNING CHIME SYSTEM

< WIRING DIAGRAM >



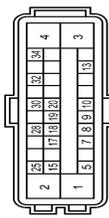
JRNWD9113GB

# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

## WARNING CHIME

|                |   |
|----------------|---|
| Connector No.  | E35   |
| Connector Name | ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) |
| Connector Type | SAZ20FB-SJZ4-U                                |



| Terminal No. | Color Of Wire | Signal Name [Specification]     |
|--------------|---------------|---------------------------------|
| 1            | B             | GROUND                          |
| 2            | B             | GROUND                          |
| 3            | G             | VALVE BATTERY                   |
| 4            | Y             | MOTOR BATTERY                   |
| 5            | LG            | STOP LAMP SW SIGNAL             |
| 7            | GR            | RR LH WHEEL SENSOR SIGNAL       |
| 8            | G             | RR LH WHEEL SENSOR POWER SUPPLY |
| 9            | BR            | FR RH WHEEL SENSOR SIGNAL       |
| 10           | GR            | FR RH WHEEL SENSOR POWER SUPPLY |
| 13           | R             | VACUUM SENSOR SIGNAL            |
| 15           | P             | CAN-H                           |
| 17           | Y             | RR RH WHEEL SENSOR SIGNAL       |
| 18           | V             | RR RH WHEEL SENSOR POWER SUPPLY |
| 19           | SB            | FR LH WHEEL SENSOR SIGNAL       |
| 20           | BG            | FR LH WHEEL SENSOR POWER SUPPLY |
| 25           | L             | CAN-H                           |
| 28           | G             | VACUUM SENSOR POWER SUPPLY      |
| 30           | R             | VDC OFF SW SIGNAL               |
| 32           | SHIELD        | VACUUM SENSOR GROUND            |
| 34           | G             | IGN                             |

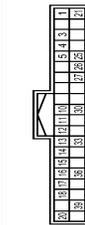


|                |                      |
|----------------|----------------------|
| Connector No.  | E60                  |
| Connector Name | PARKING BRAKE SWITCH |
| Connector Type | TBO1FW-LC            |



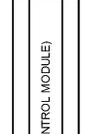
|                             |    |
|-----------------------------|----|
| Terminal No.                | 1  |
| Color Of Wire               | LG |
| Signal Name [Specification] | -  |

|                |                           |
|----------------|---------------------------|
| Connector No.  | M13                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-NH                 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | R             | PUSH SW                     |
| 3            | Y             | SENS PWR SPLY               |
| 4            | BG            | OPTICAL SENSOR              |
| 5            | LG            | -                           |
| 10           | W             | COMBI SW OUTPUT 5           |
| 11           | SB            | COMBI SW OUTPUT 4           |
| 12           | L             | COMBI SW OUTPUT 3           |
| 13           | G             | COMBI SW OUTPUT 2           |
| 14           | P             | COMBI SW OUTPUT 1           |
| 15           | G             | ONE TOUCH UNLK SENS (DR)    |
| 16           | G             | ONE TOUCH UNLK SENS (PASS)  |
| 17           | P             | RECEIVER/SENSOR GND         |
| 18           | L             | SECURITY IND LAMP CONT      |
| 20           | R             | DEFENT SW                   |
| 21           | SB            | STEP LAMP CONT              |
| 25           | R             | STOP LAMP SW2               |
| 26           | R             | EXTENDED STORAGE FUSE SW    |
| 27           | P             | STOP LAMP SW                |
| 30           | W             | DR DOOR UNLK SENS           |

|                |                           |
|----------------|---------------------------|
| Connector No.  | M14                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FB-NH                 |



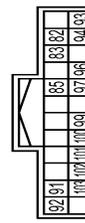
|                             |                     |
|-----------------------------|---------------------|
| Terminal No.                | 33                  |
| Color Of Wire               | V                   |
| Signal Name [Specification] | TR LID OP CANCEL SW |

|                             |           |
|-----------------------------|-----------|
| Terminal No.                | 36        |
| Color Of Wire               | G         |
| Signal Name [Specification] | HAZARD SW |

|                             |              |
|-----------------------------|--------------|
| Terminal No.                | 39           |
| Color Of Wire               | BR           |
| Signal Name [Specification] | PIN POSITION |

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 48           | R             | PUSHBTN IGN SW ILL PWR      |
| 52           | G             | DONGLE LINK                 |
| 54           | V             | COMM LINE                   |
| 55           | R             | RAIN SENSOR                 |
| 59           | P             | CAN-L                       |
| 60           | L             | CAN-H                       |
| 61           | G             | REAR WINDOW DEF RLY CONT    |
| 62           | R             | STARTER RLY CONT            |
| 64           | V             | L-KEY WARN BUZZER           |
| 65           | B             | OUTS HD LAMP CONT           |
| 66           | B             | BLOWER FAN RLY CONT         |
| 67           | WB            | IGN RLYAY (F/B) CONT        |
| 68           | R             | DIMMER                      |
| 69           | GR            | AJT SHFT SELECT PWR SPLY    |
| 70           | B             | IGN RLYAY (IPDM E/PR) CONT  |
| 71           | G             | DR DOOR REQ SW              |
| 72           | SB            | PASS DOOR REQ SW            |
| 75           | BR            | COMBI SW INPUT 5            |
| 76           | BG            | COMBI SW INPUT 4            |
| 77           | V             | COMBI SW INPUT 3            |
| 78           | Y             | COMBI SW INPUT 2            |
| 79           | LG            | COMBI SW INPUT 1            |
| 80           | L             | TR LID OPNR SW              |

|                |                           |
|----------------|---------------------------|
| Connector No.  | M15                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH24FY-VH                 |



| Terminal No. | Color Of Wire | Signal Name [Specification]    |
|--------------|---------------|--------------------------------|
| 82           | W             | REAR LH DOOR SW                |
| 83           | L             | TR LID OPEN REQ SW             |
| 85           | B             | TR ROOM LAMP CONT              |
| 87           | GR            | TRUNK LD OPEN                  |
| 82           | W             | TURN SIG RR OUTPUT (SIDE REAR) |
| 93           | G             | REAR RH DOOR SW                |
| 94           | GR            | PASSENGER DOOR SW              |
| 96           | V             | DRIVER DOOR SW                 |
| 97           | R             | TR ROOM LAMP SW                |
| 99           | GR            | INSIDE KEY ANT (TRUNK) -       |
| 100          | W             | INSIDE KEY ANT (TRUNK) +       |
| 101          | BG            | REAR BMFR ANT -                |
| 102          | LG            | REAR BMFR ANT +                |
| 103          | Y             | TURN SIG LH OUTPUT (SIDE REAR) |

|                |                           |
|----------------|---------------------------|
| Connector No.  | M17                       |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | FEA08FW-FHAG-SA           |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 139          | LG            | INT ROOM LAMP PWR SPLY      |
| 139          | P             | PASS DOOR UNLK OUTPUT       |
| 131          | Y             | BAT (FUSE)                  |
| 132          | V             | RR, RL DOOR LK OUTPUT       |
| 133          | BR            | RR, RL DOOR UNLK OUTPUT     |
| 134          | B             | GND                         |

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

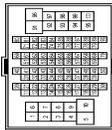
# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

## WARNING CHIME

|     |    |                                  |
|-----|----|----------------------------------|
| 135 | V  | FRONT DOOR, FL LID LK OUTPUT     |
| 136 | V  | INT ROOM LAMP CONT               |
| 137 | LG | FRONT DOOR, FL LID UNLK OUTPUT   |
| 138 | P  | REAR DOORS ACT PWR SPLY          |
| 139 | W  | BAT (FL)                         |
| 140 | BR | IGN ON                           |
| 141 | R  | PWR SPLY (BAT)                   |
| 142 | R  | FRONT DOORS, FL LID ACT PWR SPLY |
| 143 | B  | GND                              |

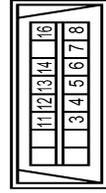
|                |                 |
|----------------|-----------------|
| Connector No.  | M19             |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80MW-CS16-TM4 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | Y             | -                           |
| 2            | G             | -                           |
| 3            | SB            | -                           |
| 4            | BR            | -                           |
| 6            | R             | -                           |
| 7            | W             | -                           |
| 8            | V             | -                           |
| 9            | BR            | -                           |
| 10           | P             | -                           |
| 11           | BR            | -                           |
| 12           | LG            | -                           |
| 13           | GR            | -                           |
| 24           | Y             | -                           |
| 25           | W             | -                           |
| 31           | BR            | -                           |
| 32           | B             | -                           |
| 33           | B             | -                           |
| 34           | V             | -                           |
| 35           | P             | -                           |
| 36           | W             | -                           |
| 37           | SB            | -                           |
| 38           | LG            | -                           |
| 40           | P             | -                           |
| 41           | G             | -                           |
| 42           | BR            | -                           |

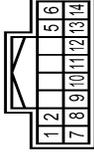
| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | L             | CAN-H                       |
| 3            | W             | BATTERY                     |
| 4            | L             | CAN-H                       |
| 5            | B             | GND                         |
| 6            | L             | CAN-H                       |
| 7            | P             | CAN-H                       |
| 9            | R             | IGN                         |
| 10           | R             | CAN-L                       |
| 11           | B             | GND                         |
| 12           | R             | CAN-L                       |

|                |                     |
|----------------|---------------------|
| Connector No.  | M25                 |
| Connector Name | DATA LINK CONNECTOR |
| Connector Type | BD16FW              |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 3            | SB            | AV COMM (L)                 |
| 4            | B             | EARTH                       |
| 5            | B             | EARTH                       |
| 6            | L             | CAN-H                       |
| 7            | V             | KLINE                       |
| 8            | W             | IGN SW                      |
| 11           | LG            | AV COMM (H)                 |
| 12           | R             | CAN-L                       |
| 13           | L             | CAN-L                       |
| 14           | P             | CAN-L                       |
| 16           | W             | POWER                       |

|                |                    |
|----------------|--------------------|
| Connector No.  | M27                |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH18FW-NH          |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1            | GR            | FR WASH MOTOR               |
| 2            | SB            | OUTPUT 4                    |
| 5            | B             | OUTPUT 3                    |
| 6            | B             | GND                         |
| 7            | V             | INPUT 3                     |
| 8            | W             | OUTPUT 5                    |
| 9            | Y             | INPUT 2                     |
| 10           | BG            | INPUT 4                     |
| 11           | LG            | INPUT 1                     |
| 12           | P             | OUTPUT 1                    |
| 13           | BR            | INPUT 5                     |
| 14           | G             | OUTPUT 2                    |

|                |                 |
|----------------|-----------------|
| Connector No.  | M40             |
| Connector Name | WIRE TO WIRE    |
| Connector Type | TH80MW-CS16-TM4 |



| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 2            | GR            | -                           |
| 3            | L             | -                           |
| 4            | V             | -                           |
| 6            | W/B           | -                           |
| 7            | W             | -                           |
| 10           | W             | -                           |
| 11           | W             | -                           |
| 12           | B             | -                           |

JRNWD9115GB

# WARNING CHIME SYSTEM

< WIRING DIAGRAM >

## WARNING CHIME

|    |        |   |   |   |   |
|----|--------|---|---|---|---|
| 13 | GR     | - | - | - | - |
| 14 | B      | - | - | - | - |
| 15 | SB     | - | - | - | - |
| 16 | B      | - | - | - | - |
| 17 | LG     | - | - | - | - |
| 18 | B      | - | - | - | - |
| 31 | W      | - | - | - | - |
| 32 | V      | - | - | - | - |
| 35 | BG     | - | - | - | - |
| 36 | G      | - | - | - | - |
| 37 | B      | - | - | - | - |
| 38 | L      | - | - | - | - |
| 39 | Y      | - | - | - | - |
| 40 | GR     | - | - | - | - |
| 41 | V      | - | - | - | - |
| 44 | BR     | - | - | - | - |
| 45 | W      | - | - | - | - |
| 46 | G      | - | - | - | - |
| 47 | R      | - | - | - | - |
| 48 | SHIELD | - | - | - | - |
| 49 | B      | - | - | - | - |
| 50 | BR     | - | - | - | - |
| 51 | L      | - | - | - | - |
| 52 | W      | - | - | - | - |
| 53 | G      | - | - | - | - |
| 54 | Y      | - | - | - | - |
| 55 | P      | - | - | - | - |
| 56 | BG     | - | - | - | - |
| 57 | GR     | - | - | - | - |
| 58 | B      | - | - | - | - |
| 59 | SB     | - | - | - | - |
| 61 | W/B    | - | - | - | - |
| 62 | SB     | - | - | - | - |
| 63 | LG     | - | - | - | - |
| 64 | Y      | - | - | - | - |
| 65 | R      | - | - | - | - |
| 66 | V      | - | - | - | - |
| 67 | LG     | - | - | - | - |
| 68 | BG     | - | - | - | - |
| 71 | V      | - | - | - | - |
| 72 | LG     | - | - | - | - |
| 73 | R      | - | - | - | - |
| 74 | BR     | - | - | - | - |
| 75 | B      | - | - | - | - |
| 78 | G      | - | - | - | - |
| 79 | R      | - | - | - | - |
| 83 | R      | - | - | - | - |
| 85 | V      | - | - | - | - |
| 91 | W      | - | - | - | - |
| 92 | R      | - | - | - | - |

|     |        |   |   |   |   |
|-----|--------|---|---|---|---|
| 94  | BG     | - | - | - | - |
| 95  | BR     | - | - | - | - |
| 96  | W      | - | - | - | - |
| 97  | LG     | - | - | - | - |
| 98  | Y      | - | - | - | - |
| 99  | BR     | - | - | - | - |
| 100 | SHIELD | - | - | - | - |

Connector No. M57  
Connector Name COMBINATION METER  
Connector Type TH40FW-NH

**HS**

| Terminal No. | Color Of Wire | Signal Name [Specification]            |
|--------------|---------------|--|
| 1            | B             | GROUND                                 |
| 7            | G             | SECURITY SIGNAL                        |
| 8            | B             | -                                      |
| 11           | W             | ALTERNATOR SIGNAL                      |
| 12           | G             | LED HEADLAMP (RH) WARNING SIGNAL       |
| 13           | BR            | LED HEADLAMP (LH) WARNING SIGNAL       |
| 14           | V             | ACC POWER SUPPLY                       |
| 16           | V             | AIR BAG SIGNAL                         |
| 17           | BR            | METER CONTROL SWITCH GROUND            |
| 18           | SB            | TRIP/RESET SIGNAL                      |
| 21           | B             | STEERING SWITCH SIGNAL GROUND          |
| 22           | P             | STEERING SWITCH SIGNAL A               |
| 23           | W/B           | STEERING SWITCH SIGNAL B               |
| 24           | L             | WASHER LEVEL SWITCH SIGNAL             |
| 25           | LG            | BRAKE FLUID LEVEL SWITCH SIGNAL        |
| 26           | V             | PARKING BRAKE SWITCH SIGNAL            |
| 27           | G             | PASSENGER SEAT BELT WARNING SIGNAL     |
| 28           | W             | SEAT BELT SWITCH SIGNAL (REVERSE)      |
| 30           | SB            | MANUAL MODE SIGNAL                     |
| 31           | G             | NONMANUAL MODE SIGNAL                  |
| 32           | BG            | MANUAL MODE SHIFT UP SIGNAL            |
| 33           | GR            | MANUAL MODE SHIFT DOWN SIGNAL          |
| 34           | BG            | PADDLE SHIFTER UP SIGNAL               |
| 35           | G             | PADDLE SHIFTER DOWN SIGNAL             |
| 36           | V             | ILLUMINATION CONTROL SWITCH SIGNAL (+) |
| 37           | GR            | ILLUMINATION CONTROL SWITCH SIGNAL (-) |
| 38           | R             | VEHICLE SPEED SIGNAL (8-PULSE)         |

|    |   |                                |
|----|---|--------------------------------|
| 39 | L | VEHICLE SPEED SIGNAL (2-PULSE) |
|----|---|--------------------------------|

Connector No. M58  
Connector Name COMBINATION METER  
Connector Type TH12FW-NH

**HS**

| Terminal No. | Color Of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 41           | L             | CAN-H                       |
| 42           | P             | CAN-L                       |
| 43           | B             | ILLUMINATION CONTROL SIGNAL |
| 44           | Y             | FUEL LEVEL SENSOR GROUND    |
| 45           | W             | BATTERY POWER SUPPLY        |
| 46           | R             | IGNITION SIGNAL             |
| 47           | LG            | AV COMMUNICATION SIGNAL (H) |
| 48           | SB            | AV COMMUNICATION SIGNAL (L) |
| 51           | BR            | FUEL LEVEL SENSOR SIGNAL    |
| 52           | B             | GROUND                      |

|      |   |   |   |   |   |
|------|---|---|---|---|---|
| 100  | V | - | - | - | - |
| 110  | V | - | - | - | - |
| 110C | V | - | - | - | - |
| 110V | V | - | - | - | - |
| 130C | L | - | - | - | - |
| 140C | Y | - | - | - | - |
| 150C | R | - | - | - | - |
| 160C | R | - | - | - | - |
| 170C | L | - | - | - | - |

Connector No. M133  
Connector Name FUSE BLOCK (JIB)  
Connector Type TH40FW-NH

**HS**

|     |     |   |   |   |   |
|-----|-----|---|---|---|---|
| 18C | P   | - | - | - | - |
| 18C | P   | - | - | - | - |
| 19C | B   | - | - | - | - |
| 20C | W   | - | - | - | - |
| 21C | L   | - | - | - | - |
| 22C | L   | - | - | - | - |
| 23C | L   | - | - | - | - |
| 25C | LG  | - | - | - | - |
| 26C | SB  | - | - | - | - |
| 27C | P   | - | - | - | - |
| 28C | W   | - | - | - | - |
| 29C | W   | - | - | - | - |
| 20C | R   | - | - | - | - |
| 30C | R   | - | - | - | - |
| 31C | W   | - | - | - | - |
| 32C | B   | - | - | - | - |
| 33C | B   | - | - | - | - |
| 34C | W/B | - | - | - | - |
| 35C | SB  | - | - | - | - |
| 36C | R   | - | - | - | - |
| 37C | W   | - | - | - | - |
| 38C | SB  | - | - | - | - |
| 38C | V   | - | - | - | - |
| 30C | P   | - | - | - | - |
| 40C | G   | - | - | - | - |
| 40C | P   | - | - | - | - |
| 50C | P   | - | - | - | - |
| 60C | G   | - | - | - | - |
| 70C | G   | - | - | - | - |
| 90C | V   | - | - | - | - |

JRNWD9116GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

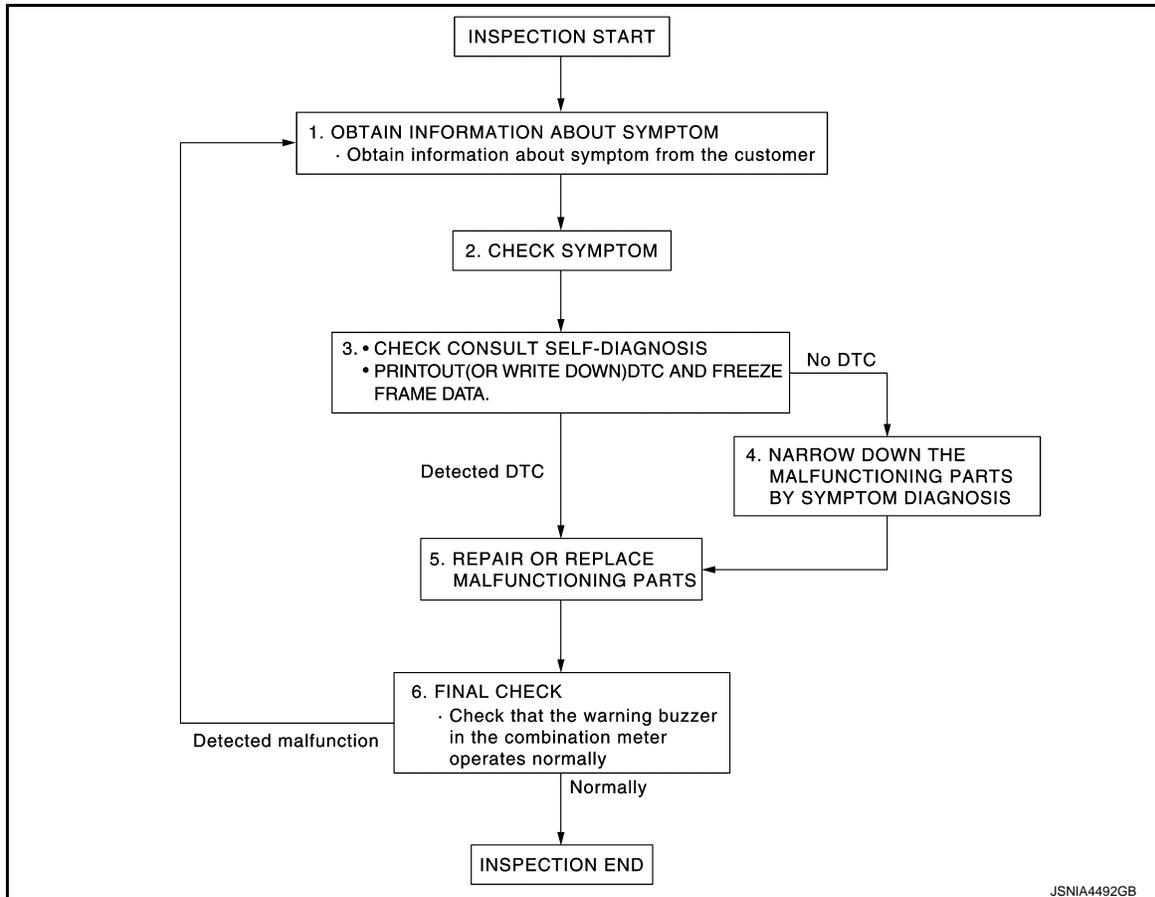
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000011281478

#### OVERALL SEQUENCE



#### DETAILED FLOW

##### 1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

>> GO TO 2.

##### 2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check if any other malfunctions are present.

>> GO TO 3.

##### 3.CHECK CONSULT SELF-DIAGNOSIS RESULTS

1. Connect CONSULT and perform self-diagnosis. Refer to [MWI-80. "DTC Index"](#).
2. When DTC is detected, follow the instructions below:
  - Record DTC and Freeze Frame Data.

Are self-diagnosis results normal?

- YES >> GO TO 4.
- NO >> GO TO 5.

# DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

---

## 4.NARROW DOWN MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

---

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

## 5.REPAIR OR REPLACE MALFUNCTIONING PARTS

---

Repair or replace malfunctioning parts.

**NOTE:**

If DTC is displayed, erase DTC after repairing or replacing malfunctioning parts.

>> GO TO 6.

## 6.FINAL CHECK

---

Check that the warning buzzer in the combination meter operates normally.

Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 1.

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

#### COMBINATION METER : Diagnosis Procedure

INFOID:000000011281479

#### 1. CHECK FUSE

Check for blown fuses.

| Power source                | Fuse No. |
|-----------------------------|----------|
| Battery                     | 6        |
| Ignition switch ON or START | 11       |
| Ignition switch ON or ACC   | 1        |

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2. CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

| Terminals         |          | Ground | Ignition switch position | Voltage (Approx.) |
|-------------------|----------|--------|--------------------------|-------------------|
| (+)               | (-)      |        |                          |                   |
| Combination meter |          |        |                          |                   |
| Connector         | Terminal |        |                          |                   |
| M58               | 45       |        | OFF                      | Battery voltage   |
|                   | 46       |        | ON                       |                   |
| M57               | 14       |        | ACC                      |                   |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

#### 3. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector.
3. Check continuity between combination meter harness connector and ground.

| Combination meter |          | Ground | Continuity |
|-------------------|----------|--------|------------|
| Connector         | Terminal |        |            |
| M57               | 1        |        |            |
| M58               | 52       |        |            |

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

# METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## METER BUZZER CIRCUIT

### Component Function Check

INFOID:000000011281480

#### 1.CHECK OPERATION OF METER BUZZER

1. Select "BUZZER" of "BCM" on CONSULT.
2. Perform "LIGHT WARN ALM" of "Active Test."

Does meter buzzer beep?

- YES >> INSPECTION END  
NO >> GO TO 2.

#### 2.CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" for the "METER/M&A" and check the "BUZZER" monitor value.

BUZZER  
Under the condition of buzzer input : On  
Except above : Off

Is the inspection result normal?

- YES >> Refer to [WCS-53. "Diagnosis Procedure"](#).  
NO >> Replace BCM. Refer to [BCS-98. "Removal and Installation"](#).

### Diagnosis Procedure

INFOID:000000011281481

#### 1.CHECK POWER SUPPLY OF COMBINATION METER

Check power supply of combination meter. Refer to [MWI-104. "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-126. "Removal and Installation"](#).  
NO >> Repair power supply circuit of combination meter.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

< DTC/CIRCUIT DIAGNOSIS >

## SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

### Component Function Check

INFOID:000000011281482

#### 1. CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" for the "METER/M&A" and check the "BUCKLE SW" monitor value.

BUCKLE SW  
When seat belt is fastened. : Off  
When seat belt is unfastened. : On

Is the inspection result normal?

YES >> INSPECTION END  
NO >> Refer to [WCS-54, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000011281483

#### 1. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Disconnect combination meter connector and seat belt buckle switch (driver side) connector.
2. Check continuity between combination meter harness connector and seat belt buckle switch (driver side) harness connector.

| Combination meter |          | Seat belt buckle switch (driver side) |          | Continuity |
|-------------------|----------|---------------------------------------|----------|------------|
| Connector         | Terminal | Connector                             | Terminal |            |
| M57               | 28       | B4                                    | 1        | Existed    |

3. Check harness continuity between combination meter harness connector and ground.

| Combination meter |          | Ground | Continuity  |
|-------------------|----------|--------|-------------|
| Connector         | Terminal |        |             |
| M57               | 28       |        | Not existed |

Is the inspection result normal?

YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check harness continuity between seat belt buckle switch (driver side) harness connector and ground.

| Seat belt buckle switch (driver side) |          | Ground | Continuity |
|---------------------------------------|----------|--------|------------|
| Connector                             | Terminal |        |            |
| B4                                    | 2        |        | Existed    |

Is the inspection result normal?

YES >> GO TO 3.  
NO >> Repair harness or connector.

#### 3. CHECK SEAT BELT BUCKLE SWITCH

Check seat belt buckle switch. Refer to [WCS-54, "Component Inspection"](#).

Is the inspection result normal?

YES >> INSPECTION END  
NO >> Replace seat belt buckle (driver side). Refer to [SB-12, "SEAT BELT BUCKLE : Removal and Installation"](#).

### Component Inspection

INFOID:000000011281484

#### 1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

# SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT (DRIVER SIDE)

## < DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.
2. Disconnect the seat belt buckle switch (driver side) connector.
3. Check continuity between terminals.

| Terminal |   | Condition                     | Continuity  |
|----------|---|-------------------------------|-------------|
| 1        | 2 | When seat belt is fastened.   | Not existed |
|          |   | When seat belt is unfastened. | Existed     |

### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat belt buckle (driver side). Refer to [SB-12. "SEAT BELT BUCKLE : Removal and Installation"](#).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# PARKING BRAKE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## PARKING BRAKE SWITCH SIGNAL CIRCUIT

### Component Function Check

INFOID:000000011281485

#### 1. CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" for the "METER/M&A" and check the "PKB SW" monitor value.

PKB SW

When parking brake is applied. : On

When parking brake is released. : Off

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to [WCS-56, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000011281486

#### 1. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector and parking brake switch connector.
3. Check continuity between combination meter harness connector and parking brake switch harness connector.

| Terminals         |          |                      |          | Continuity |
|-------------------|----------|----------------------|----------|------------|
| Combination meter |          | Parking brake switch |          |            |
| Connector         | Terminal | Connector            | Terminal |            |
| M57               | 26       | E60                  | 1        | Existed    |

4. Check continuity between combination meter harness connector and ground.

| Terminals         |          |        | Continuity  |
|-------------------|----------|--------|-------------|
| Combination meter |          | Ground |             |
| Connector         | Terminal |        |             |
| M57               | 26       |        | Not existed |

Is the inspection result normal?

YES >> Refer to [WCS-56, "Component Inspection"](#).

NO >> Repair harness or connector.

### Component Inspection

INFOID:000000011281487

#### 1. CHECK PARKING BRAKE SWITCH

Check parking brake switch. Refer to [BRC-158, "Component Inspection"](#).

Is the inspection result normal?

YES >> INSPECTION END.

NO >> Replace parking brake switch. Refer to [PB-9, "Exploded View"](#).

# THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### THE LIGHT REMINDER WARNING DOES NOT SOUND

#### Description

INFOID:0000000011281488

Light reminder warning chime does not sound even though headlamp is illuminated.

#### Diagnosis Procedure

INFOID:0000000011281489

#### 1. CHECK COMBINATION SWITCH (LIGHTING SWITCH) OPERATION

Check that the headlamps operate normally by operating the combination switch (lighting switch).

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to [EXL-157, "Symptom Table"](#).

#### 2. CHECK DRIVER SIDE DOOR SWITCH SIGNAL CIRCUIT

Perform the check for the driver side door switch signal circuit. Refer to [DLK-111, "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-98, "Removal and Installation"](#).

NO >> Repair or replace malfunctioning parts.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS

# THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

---

## THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

### Description

INFOID:000000011281490

- While traveling at 7 km/h or more, the parking brake warning buzzer sounds continuously even when the parking brake is released.
- The parking brake warning buzzer does not sound even when the parking brake is applied while traveling at 7 km/h or more.

### Diagnosis Procedure

INFOID:000000011281491

#### 1. CHECK PARKING BRAKE WARNING LAMP

---

1. Start the engine.
2. Check the operation of the brake warning lamp by operating the parking brake.

When parking brake is applied. : ON

When parking brake is released. : OFF

#### Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-126, "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

---

Check for the parking brake switch signal circuit. Refer to [WCS-56, "Diagnosis Procedure"](#).

#### Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-126, "Removal and Installation"](#).

NO >> Repair or replace malfunctioning parts.

# THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

## THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

### Description

INFOID:000000011281492

- Seat belt reminder warning does not sound.
- Seat belt reminder warning sounds continuously.

### Diagnosis Procedure

INFOID:000000011281493

#### 1. CHECK SEAT BELT WARNING LAMP

1. Turn ignition switch ON.
2. Check the operation of the seat belt warning lamp in the combination meter.

Seat belt fastened : OFF  
Seat belt not fastened : ON

#### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> GO TO 4.

#### 2. CHECK BCM OUTPUT SIGNAL

Check if the seat belt warning chime is activated by performing BCM active test. Refer to [WCS-30, "BUZZER : CONSULT Function \(BCM - BUZZER\)"](#).

#### Is the inspection result normal?

- YES >> INSPECTION END  
NO >> GO TO 3.

#### 3. CHECK COMBINATION METER INPUT SIGNAL

Check if buzzer switches to proper condition (On/Off) on data monitor of combination meter. Refer to [WCS-23, "CONSULT Function"](#).

Buzzer active condition : On  
Buzzer non-active condition : Off

#### Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-126, "Removal and Installation"](#).  
NO >> Replace BCM. Refer to [BCS-98, "Removal and Installation"](#).

#### 4. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) CIRCUIT

Perform the check for the seat belt buckle switch (driver side) circuit. Refer to [WCS-54, "Diagnosis Procedure"](#).

#### Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-126, "Removal and Installation"](#).  
NO >> Repair or replace malfunctioning parts.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

WCS